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A COMPREHENSIVE PLAN
BOILING SPRINGS, NORTH CAROLINA

ABSTRACT

TITLE	A Comprehensive Plan, Boiling Springs, North Carolina
AUTHOR	State of North Carolina, Department of Conservation and Development, Division of Community Planning, Piedmont Area Office, Salisbury, North Carolina, 28144
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ABSTRACT	The report combines the Land Development Plan and Thoroughfare Plan with an introduction which includes a Population and Economic Study, a Land Use Analysis, and a Public Facilities Plan. A wide variety of municipal services and functions are examined with respect to present and future requirements. Where inadequacies occur, plans are presented.

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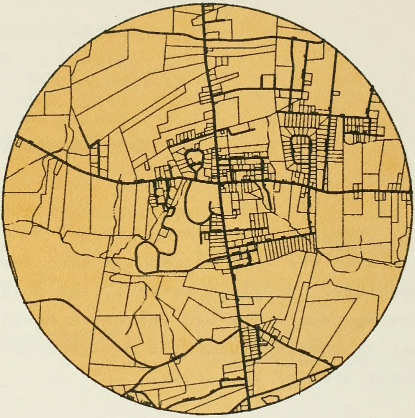

A COMPREHENSIVE PLAN

BOILING SPRINGS, NORTH CAROLINA

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INTRODUCTION

INTRODUCTION

This report is one of several contractual elements[1] that are being prepared by the Town of Boiling Springs with assistance from the North Carolina Department of Conservation and Development, Division of Community Planning. Although technical assistance is provided by the State, the funds for the planning project are partially financed through a grant from the United States Department of Housing and Urban Development and by allocation of the town. This method enables Boiling Springs to acquire the staff and facilities of a professional planning agency that would normally be beyond the budget capability of a town of its size.

PURPOSE

One of the primary steps for a town engaging in comprehensive planning is to make a detailed study of its resources, possibilities and needs. Only after this survey and analysis may a subsequent plan be formulated for the orderly and beneficial development of the town.

The comprehensive plan for Boiling Springs is concerned primarily with defining the form and extent of the town's growth for the next twenty years. It is designed to insure that Boiling Springs' future growth and development will be orderly and pleasant, by recommending how existing and proposed streets and recreation, industrial, commercial, and other lands should be related to each other. The plan provides a general framework within which further detailed development can be made.

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[1] The elements in the two-year contract are: base mapping, a comprehensive plan, zoning ordinance and subdivision regulations.

The comprehensive plan is intended to act as a guide to all persons responsible for the development of Boiling Springs. To the private citizen, it indicates the type of neighborhood he can expect to live in and the best locations for his business or industry; to the town officials and Planning Board, it serves as an outline for future growth. It can be used to help judge and evaluate each new development before it is finally approved for construction.

This report on the comprehensive plan is presented in several parts:

Chapter II is a study of population and economic trends of the town. It attempts to analyze past population trends, project future population trends, and discuss the town's economic potential.

Chapter III is a study of the area's natural environment and what affect it has on Boiling Springs.

Chapter IV is an analysis of Boiling Springs' existing land uses. It indicates the types, locations, and amounts of the various uses of land.

Chapter V examines a wide variety of public facilities and services provided in the area. These services are evaluated with respect to both present and future requirements. Where inadequacies occur recommendations are presented to correct the deficiencies.

Chapter VI is a development plan which designates or assigns land uses to the undeveloped land into which the town is going to expand. A thoroughfare plan is also presented to improve traffic circulation. This chapter provides the key to a balanced community.

Past development errors and opportunities for future improvements to the area are described in this report. It is, therefore, anticipated that from this information ample knowledge will be gained, and the seed of community spirit can be planted in the minds of those who desire to make Boiling Springs a better town in which to live.

METHODOLOGY

The primary source of information about people is the U.S. Census of Population. The decennial Census includes age, sex, race, income, occupation and education data. Data from the 1960 Census is already eight years old and many characteristics have changed in the intervening period. However, the 1960 Census is about the only officially documented source the Planning Board can draw on. Nevertheless, the development of some recent trends in Boiling Springs can be seen by comparing information from the Decennial Census with more recent data from local and state agencies.

The town's economy in relation to its areawide environment is also examined, the human and physical resources available for development are evaluated, and the employment patterns are identified. Considerable attention is given to present economic activity.

In the Fall of 1968, a base map at a scale of one inch equalling 400 feet was compiled of the Boiling Springs area by the Division of Community Planning. This map depicts the physical and political features of the area by showing rights-of way, property lines, water bodies, creeks and branches, town limit lines, street names and road numbers.

Land use data was assembled from field surveys and then compiled, coded and recorded on the base map. This information was then tabulated by the appropriate land use classification and by numbers of acres, percentage of the developed land, and by the percentage of the total land area. This was done for the municipal corporate area, the one-mile extra-terrirorial fringe, and the entire planning area.

A quantitative and qualitative analysis of the land use data was then conducted to determine adequately developed areas as well as problem areas that exist in the community.

Public facility information was obtained from interviews with department heads, local and county officials. Recommendations were based on appropriate standards.

PLANNING AREA

The planning area includes the town of Boiling Springs and all the territory extending for one-mile beyond its corporate limits. The fringe area around the town is included primarily because much of a community's future urban growth takes place in this area. The town of Boiling Springs also has the authority to zone the uses of land and to regulate its subdivisions within the one-mile extraterritorial area.[1]

The area within the town consists of approximately 3.5 square miles, while the one-mile fringe area contains another 9 square miles. Boiling Springs' entire planning area therefore represents a land area of more than 12 square miles.

REGIONAL SETTING

Boiling Springs is situated on the southwestern corner of Cleveland County in Township 2 (Boiling Springs) near the South Carolina line. The town is located eight miles southwest of Shelby, the County Seat; 15 miles east of Forest City; and 15 miles north of Gaffney, South Carolina.

Cleveland County is found in the southwestern Piedmont section of North Carolina in the foothills of the beautiful Blue Ridge Mountains. In 1841, Cleveland County was formed from a portion of Rutherford and Lincoln Counties. This 466 square mile county has an interesting elevation range from 800 feet to nearly 3,000.

ACCESSIBILITY

While Boiling Springs is not located on the Federal Highway System, it is, however, situated between US 74 (to the north) and Interstate 85 to the south. Each of these highways are within a few minutes drive of the town. North Carolina Highway 150 does run through the east and south of Boiling Springs. By not being directly on the Federal arteries, the town is not disturbed by large amounts of "through traffic" by transients. Even still, the townspeople have reasonably good access to the major cities in the region. The town does not have any link with the railroad service.

The Shelby Airport is located about 3½ miles to the east of Boiling Springs on NC 150. This facility has a 4,300 foot paved runway with high intensity lighting for night landings. Automobile parking space is adequate but additional hangers are needed for aircraft. Mechanical work is conducted at the airport by the fixed base operator. There has been come discussion of a crosswind runway being constructed. This would add greatly to the airport. The airfield is a source of pleasure to pilots and future pilots of private aircraft who reside in the area and a great attraction for business and industry.

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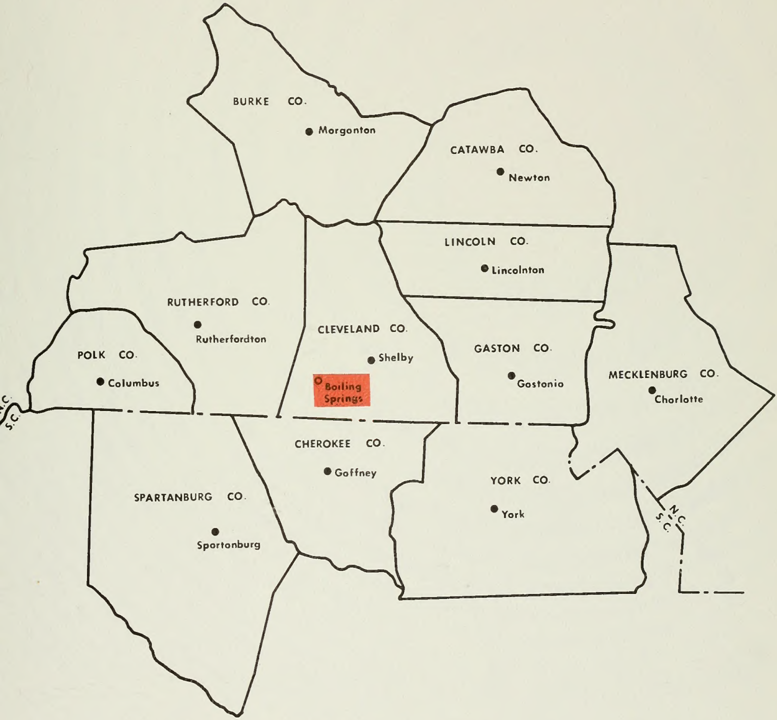
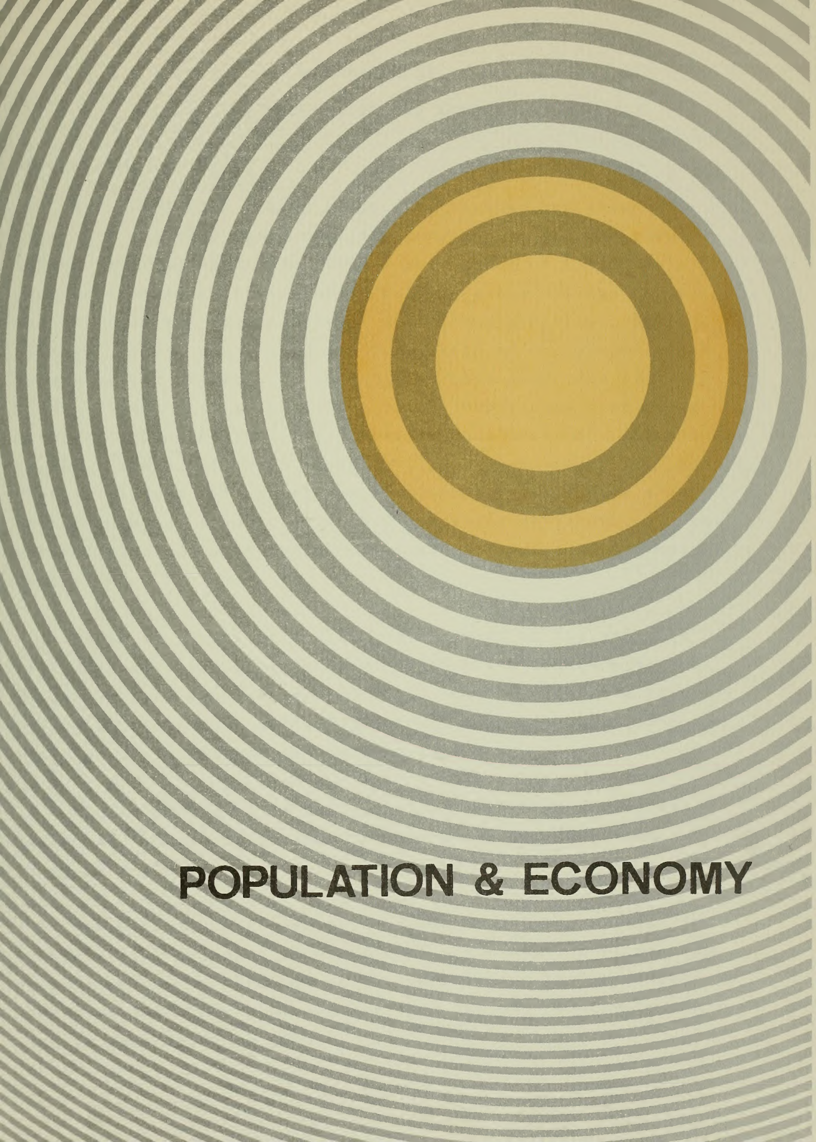
[1] North Carolina General Statutes, 160-181.2 and 160-226.

REGIONAL SETTING

(SHOWING COUNTY SEATS)



MAP-1



POPULATION & ECONOMY

CHAPTER II

POPULATION AND ECONOMY

POPULATION

The population growth of Boiling Springs has shown considerable increase since the 1930 census recorded the town as having 672 residents. In 1960, a population of 1,311 was recorded; however, this number included those college students who lived in the dormitories at Gardner-Webb College. Boiling Springs' growth since 1960 is due largely to the presence and growth of the college. A census conducted under the 1965 Voting Rights Act estimated the town's population (including resident students) at 1,711. Present enrollment for the school is about 1,400, of which about 900 are in residence. This means that, excluding college students, Boiling Springs has a current population of only about 810 permanent residents, but has a total (including students) population of about 2,100 residents.

There is very little urban development in the one-mile fringe area surrounding the town in that it has remained mostly as farm and undeveloped land. An estimated 622 persons reside in the fringe area. Therefore, approximately 2,800 persons reside in the entire planning area.

The following table indicates the numerical and percentage gains in Boiling Springs, Township #2, and Cleveland County for the past several decades.

The population growth of the town has shown a steady increase during the past 36 years with the exception of one ten-year period, 1930-1940, at which time Boiling Springs experienced an 8.8% decrease. During that period, the town's population dropped by 59 persons.

TABLE 1 TOWN, TOWNSHIP AND COUNTY POPULATION GROWTH, 1930-1960

	1930	Per Cent Inc.	1940	Per Cent Inc.	1950	Per Cent Inc.	1960	Per Cent Inc.	1966*	Per Cent Inc.
Town	672		613	-8.8	1,145	+86.8	1,311	+14.5	1,771	+35.1
Twp.#2	2,985	+26.2	2,925	-2.0	3,876	+32.5	3,822	-1.4	4,277	+11.9
County	51,914	+51.5	58,055	+11.8	64,357	+10.9	66,048	+2.6	69,372	+5.0

*1966 Figures from a special census conducted under the 1965 Voting Rights Act.

Source: Population of Counties and Minor Civil Divisions, 1910-1960, Piedmont Subregion, Division of Community Planning, January, 1962

Although the other decades register a substantial rate of growth, there has been considerable variation in the increases. The greatest rate of increase was between 1940 and 1950, when the town's population soared upward with an 86.8% increase. The majority of that growth was due to the fact that in 1950 for the first time, college students at Gardner-Webb College were counted as residents of Boiling Springs and not of their respective home towns.

Since World War II, the college has grown considerably in both its student body and physical plant, and this has been the primary reason for the town's similar growth.

MIGRATION[1]

A migration pattern for a community can be determined by examining a given age and sex group for 1950 and then comparing it to an age group ten years older in 1960. Using this method, it can be ascertained how many persons of that specific age and sex group remained in Boiling Springs after a ten-year period.

---

[1] Migration refers to net movement; that is, the number of people who moved in minus the number of people who moved out. When more people moved out than moved in, the word "outmigration" is used.

It should be noted that death probably accounts for much, if not all, of the per cent drop in most of the older age groups (especially age group 65 and over) as shown in Table 2.

TABLE 2 NET MIGRATION BY SEX AND AGE GROUPS, TOWN OF BOILING SPRINGS

Age Group in 1950	Under 5	5-14	15-24	25-34	35-44	45-54	55-64	65 & over
Total Population								
Males								
1950	59	93	206	80	65	28	25	22
1960	42	240	86	58	55	29	26	4
Per Cent of 1950 group present in 1960	71.2	258.1	41.7	72.5	84.6	103.6	104.0	18.2
Females								
1950	61	88	171	84	64	40	31	28
1960	53	173	80	72	64	42	31	15
Per Cent of 1950 group present in 1960	86.9	196.6	46.8	85.7	100.0	105.0	100.0	53.6

Source: Census of the Population, 1950, 1960

The largest outmigration occurred in the 15-24 age group. In other words, less than half of the youths in this group living in Boiling Springs in 1950 were present in the community ten years later. This decline is easily explainable when one realizes the affect Gardner-Webb College has on the community. The students, most of whom fell in the 15-24 age group in 1950, were counted in that year's census. Ten years later, in 1960, when these same people were between the ages of 25-34, they had graduated from college and returned to their original homes or to new places of employment.

The cycle was a repeating one, however, as is exemplified by the increase in the 5-14 age group. In 1950, Boiling Springs had a population of 181 between the ages of 5-14. Ten years later when this group was between the ages of 15-24, an increase of 413 was reported. This was due to the incoming students to the community. As a result, one age group off-sets the other.

Another age group with a considerable outmigration pattern is the 25-34 class. This is the group which is most productive in the community. They comprise the bulk of the labor force and are establishing salaries which they spend locally. When they leave, they are usually replaced by non-trained personnel who earn lesser salaries. Also, this group is usually more civic-minded and participate more actively in local projects. Furthermore, when these persons leave the town, the potential school population is decreased (as evidenced by the decline in the Under 5 age group).

RACIAL COMPOSITION

The racial composition in Boiling Springs changed considerably during the 1950's. In 1950, the town's Negro population was recorded as 85 (44 males and 41 females). By 1960 this number had been reduced to 34 -- evenly divided with 17 males and 17 females. It can, therefore, be assumed that Boiling Springs' Negroes were moving away at a fairly rapid rate.

Since the 1960 census, Gardner-Webb College has admitted Negroes, and as a result a slight incline in their population will be noticed during the planning period.

EDUCATIONAL ATTAINMENT

The average level of educational attainment in Boiling Springs is assumed to be higher than it is for the township and county, due to the presence of the college with its teachers, students, and graduates who remain in town. Educational data for the town is not available; however, in 1960 the median school years completed by adults 25 years and older for the township was 8.5; the county, 8.6; and the state, 8.9. These are all extremely low when one realizes that 12 years of education is considered to be the MINIMUM requirement to ensure both stable and permanent employment. By the end of the planning period this requirement will even be much higher.

INCOME

Per capita income data for 1959 was not available for the town but in the township it was $963. This figure is considerably lower than both the state average of $1,206 and Cleveland County's average of $1,160. In fact, over 39% of the families in Boiling Springs Township had an income of less than $3,000 in 1959. This low income level is one of the prime reasons why the township (and especially the county) is experiencing a high outmigration of its population -- Cleveland County residents are seeking higher paying employment elsewhere.

TABLE 3

1959 FAMILY INCOME, CLEVELAND COUNTY AND BOILING SPRINGS TOWNSHIP

	Cleveland County	Boiling Springs Township
All Families	16,161[1]	866[2]
Under $1,000	1,826	96
$1,000-1,999	1,896	134
$2,000-2,999	2,176	111
$3,000-3,999	2,422	145
$4,000-4,999	2,108	109
$5,000-5,999	1,798	90
$6,000-6,999	1,322	79
$7,000-7,999	895	56
$8,000-8,999	594	27
$9,000-9,999	304	8
$10,000-14,999	555	8
$15,000-24,999	181	-
$25,00 & over	84	3
Total family income	$73,918,500	$ 3,480,500
Median family income	$ 3,901	$ 3,634
Mean family income	$ 4,574	$ 4,019
Per capita income	$ 1,160	$ 963

Source: 1/ 1960 U.S. Census of Population
2/ 1960 U.S. Unpublished Census, Special Table PH-3

POPULATION PROJECTIONS

There are several methods which planners use to project future populations. Usually, mathematical formulas are used to derive projections by taking past population trends and applying them to present rates of growth.

In small communities such as Boiling Springs, the normal "status quo" rate of growth can be severely altered by both foreseen and unforeseen events. Of course, populations can radically change because of Acts of God, such as fire, flood and famine. By the same token, when fewer employment opportunities exist (e.g., a college moving, such as Wake Forest

University), a higher proportion of the population's out-migration to other areas will be experienced. On the other hand, new employment could become a positive factor in increasing the inmigration rates of a town.

Population estimates are shown in Table 4 for the town of Boiling Springs, Boiling Springs Township and Cleveland County for 1970, 1980, and 1988. The town's population has increased considerably since the recent expansion of the college to a four-year school. As the college grows, so grows Boiling Springs. The township will show only a moderate increase, as will Cleveland County. A large outmigration trend is their main deterrent to growth.

The averages of four methods[1/] were used in determining the population projections for 1970, 1980, and 1988.

TABLE 4 POPULATION PROJECTIONS

	1966	Per Cent Inc.	1970	Per Cent Inc.	1980	Per Cent Inc.	1988	Per Cent Inc.
Boiling Springs	1,771	35.1	2,187	23.5	2,928	34.3	4,700	60.5
Township #2	4,277	11.9	4,394	2.7	4,832	9.9	5,950	23.1
Cleveland County	69,372	5.0	70,109	1.1	74,213	.8	82,600	11.3

Source: Division of Community Planning

[1/] The four methods used to project populations in the areas were: cohort survival method, ratio method, arithmetic projection method, and the geometric projection method.

There could be almost 3,000 people living in Boiling Springs in ten years. If past trends continue and the college keeps growing, the town will have a 1988 population of 4,700 persons.

ECONOMY

The economy of Boiling Springs is affected primarily by one basic activity -- Gardner-Webb College. (Basic activities are those which bring money from outside the community into Boiling Springs.) Although a college is not generally considered as a basic industry, it is very much that in Boiling Springs and a prime example of bringing "new" money into the town. For example, the college students' source of income is usually by summer jobs or their parents, who for the most part, reside in other communities. During the school months, they spend that money in Boiling Springs; thus, Gardner-Webb "brings in" money from the outside.

Manufacturing and retail sales are usually the foremost activities in a town's economy. This is not the case in Boiling Springs. The town is strictly a small college town with a minimum of industry and convenience retail establishments.

EMPLOYMENT BY INDUSTRY GROUP

This section deals with Boiling Springs' major employment categories or the types of business in which the most people are currently employed. These categories indicate where people work, not the actual kind of work they do. It is necessary to consider this information to gain an economic orientation of the community. The following table presents a breakdown on

1960 employment by industry group. It should be remembered that the figures in Table 5 are by residence. For example, if there are 105 people in Boiling Springs Township employed by construction-related industries, this number does not necessarily mean that these jobs are in that township -- they could be in Shelby or Forest City. Information for the town was not available, so township and county figures will be used.

TABLE 5 EMPLOYMENT BY INDUSTRY, 1960, CLEVELAND COUNTY AND BOILING SPRINGS TOWNSHIP

	Cleveland County	Boiling Springs Township
Total employed	24,708 1/	1,411 2/
Agriculture	2,217	164
Mining	152	-
Construction	1,664	105
Manufacturing:		
Furniture, lumber & wood products	616	20
Metal industries	149	4
Machinery	152	-
Transportation equipment	8	-
Other durable goods	725	51
Food & kindred products	611	46
Textile & apparel products	7,351	470
Printing, publishing & allied ind.	253	-
Other nondurable goods	86	4
Railroad & railway express service	42	-
Other transportation	495	39
Communication & utilities and sanitary service	442	4
Wholesale trade	610	-
Eating & drinking places	262	19
Other retail trade	2,718	152
Business & repair services	382	-
Private households	1,457	55
Other personal services	749	16
Hospitals	344	16
Educational services	1,105	151
Other prof. & related services	587	28
Public administration	433	19
Other industries (including not reported)	532	48
Finance, insurance and real estate	566	-

Source: 1/ 1960 U.S. Census of Population, N.C. General Social and Economic Characteristics.
2/ 1960 U.S. Unpublished Census - Special Table PH-4

In 1960 over 40% (595) of the township's 1,411 workers were employed in the classification of manufacturing and retail trade employed 152 persons. The town did not have that many jobs in 1960, so the majority of these persons only live in Boiling Springs but commute to Shelby or other places to work. Boiling Springs can be classed as a "bedroom community" in that a large number of its residents only live there but work elsewhere.

It can be assumed that most of the 164 persons employed in agriculture and the 151 in educational services did remain in the township farms and schools for employment.

WORKER MOBILITY

Most of those who reside in Boiling Springs township work in other places. Of the 1960 township total of 1,411 workers, 294 of these persons actually commuted outside of Cleveland County for work. (See Map 2). Sixty-four persons' place of work was not reported. Of the township total, 1053 workers did stay in the county.

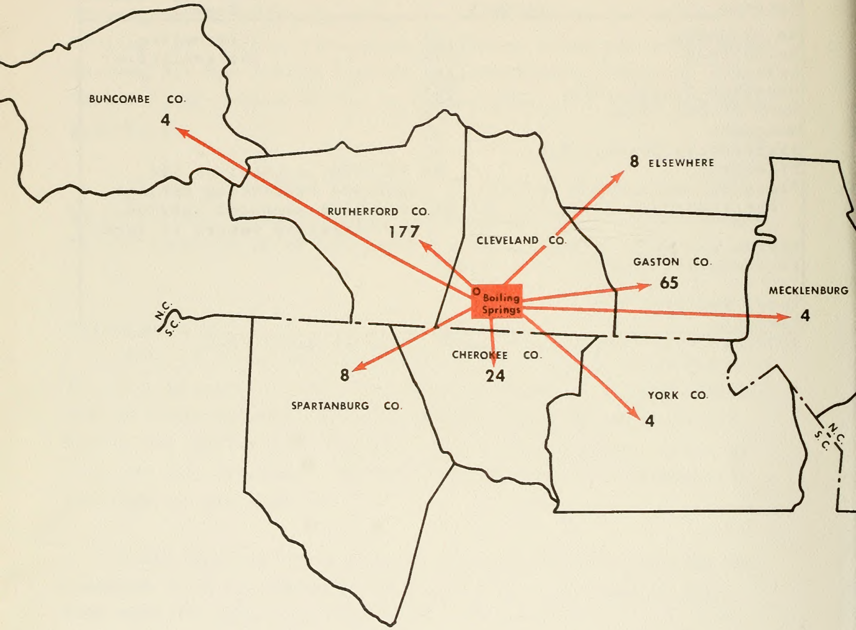
Exact data is not available for the number of people who commuted into the township to work, but it is assumed that more workers were lost than were gained.

TABLE 6 WORKER MOBILITY FOR BOILING SPRINGS TOWNSHIP, 1960

Counties in Mobility Pattern	Went Out of Cleveland County to Work	Came into Cleveland County to Work
Mecklenburg	4)	(Information not available)
Rutherford	177)	
Gaston	65)	
Cherokee County, S.C.	24)	
York County, S.C.	4)	
Buncombe	4)	
Spartanburg County, S.C.	8)	
Elsewhere	8)	In 1960, a total of 294 workers in Boiling Springs Township commuted outside of Cleveland County to work.
Place of work not reported	64	
Reside and Work in Cleveland County	1,053	
Total Employed in Township	1,411	

SOURCE: U.S. Unpublished Census, Special Table PH-4

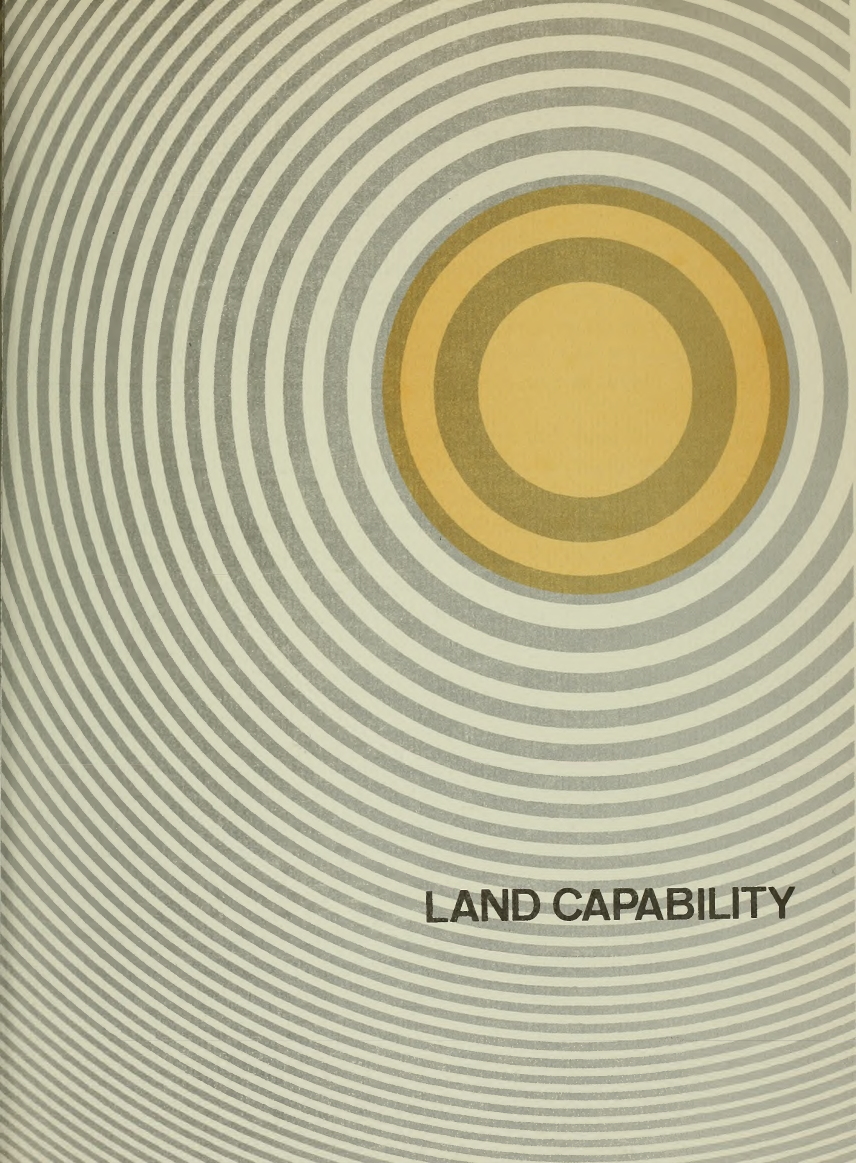
WORKER MOBILITY



OUT-COMMUTING PATTERNS OF WORKERS
FROM BOILING SPRINGS TOWNSHIP
EMPLOYED IN OTHER COUNTIES, 1960.

ARROWS SHOW NUMBER OF OUT-COMMUTING
WORKERS EMPLOYED IN OTHER COUNTIES

MA



LAND CAPABILITY

CHAPTER III

LAND CAPABILITY

A community's natural environment must be taken into consideration before town planners can determine which land is suitable for intensive urban development. This section of the report will present the significant influence that the physical characteristics of the land and weather have upon Boiling Springs. These natural determinants include the topography, water, drainage, soils, undeveloped land, and climate.

Many of the problems of urbanization and town development can be avoided by giving careful attention to these characteristics of the physical environment before any serious policy or case decisions are made. The needless waste of land, soil erosion, water and air pollution, duplicated utilities, inadequate services and other undesirable effects of the manmade living environment can be prevented through the logical use of land resources.

TOPOGRAPHY

Boiling Springs is located in the "rolling hills" of southern Cleveland County. A map has been prepared by the U.S. Department of the Interior Geological Survey which is of sufficient scale (contour interval 20 feet) to give the general topography of the area.

There is a moderate elevation variation in Boiling Springs and its surrounding fringe area. When compared to the county, the town's slope could be considered average. The town has an altitude of approximately 990 feet. The highest point in the town is several yards north of Green Bethel School on Gordon Avenue.

The planning area is adequately drained.

The range is normally under 15% which permits residential, commercial, and industrial construction throughout the area without extensive excavation being required. This means the land slopes less than 15 feet, in height and depth, in every 100 feet of distance. While no sizable parcel of land in the area would not be capable of utilization for potential urban development, intelligent consideration should be given to any change in the land's natural contours during construction projects.

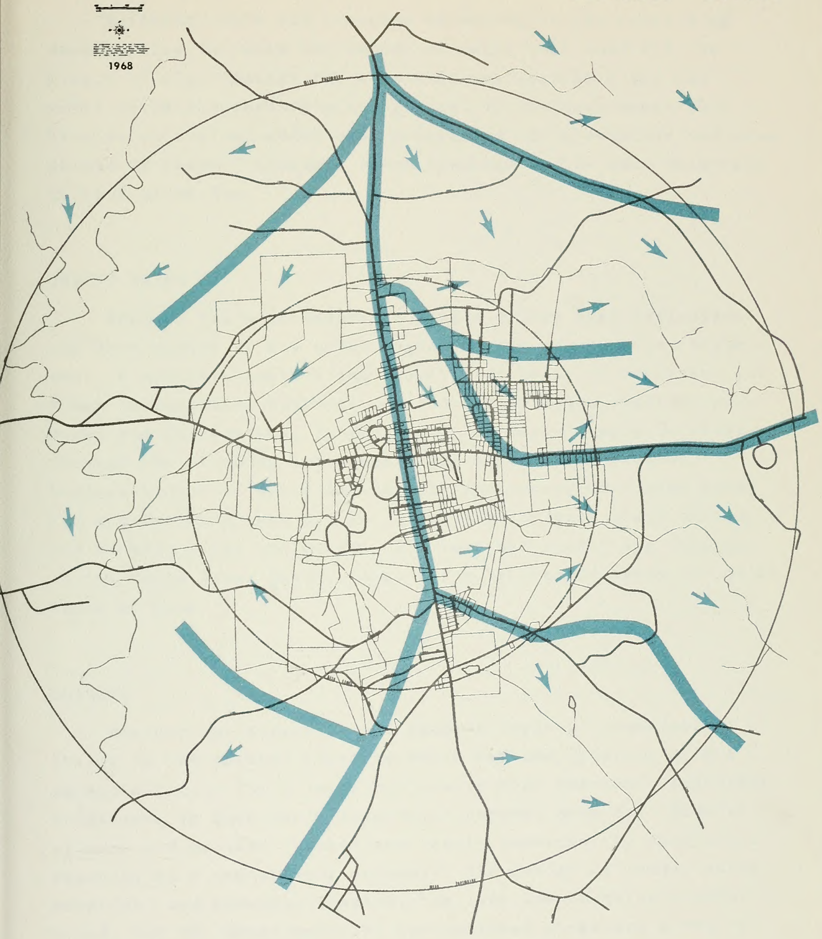
DRAINAGE

Urban development is directly affected by the natural environmental factor of drainage. Development problems created by flooding and erosion can be avoided by using the natural drainage and understanding the limitations set by soils and topography.

The Boiling Springs area is well drained with only a few exceptions. Occasional flooding after heavy rains is experienced at the intersection of Fairview Street and East College Avenue and also at the Forest Hill Avenue area. The town is located generally on a ridge running almost north and south through the center of town, almost dividing the corporate area. The western portion of the town is in the drainage area of Sandy Run Creek and the eastern portion is located in the drainage area of Poplar Branch Creek. These two creeks channel the area's surface water southward to the Broad River and from there into South Carolina.

BOILING SPRINGS
NORTH CAROLINA

APPROXIMATE
DRAINAGE BASINS



LEGEND

▬ RIDGE LINES

← DIRECTION OF DRAINAGE

MAP-3

Building roofs and expanses of paving in the urbanizing developments increase the amount of water that runs off the area. It also reduces the area that was available for the water to be absorbed into the ground. In the case where this becomes excessive, additional protective and preventive measures should be taken. Adequate storm sewerage is the best deterrent to this situation.

GROUND WATER

Perhaps the most important single factor that influences the development of any urban region is the area's water resources. A specific quality and quantity of water is necessary for human consumption, business and industrial uses, sanitary purposes and recreational facilities. The basic supply of water through the planning area comes from underground stouces. Surface bodies of water include the previously mentioned Sandy Run and Poplar Branch Creeks, as well as several small streams and manmade lakes and ponds. The town and county are located in the Broad River Basin. That river is located about two miles south of town.

CLIMATE

Weather has always been a favored topic of conservation for it is the natural resource which has the greatest affect on man's life. The climate has always been extremely important to farmers in that their livelihood depends upon it. However, climate and weather records are vastly important to many other segments of a community's economy. The design of roads, water supplies, and sewerage systems; the location of certain industries; and the development of recreational areas are a few of the many activities in which climate is an important factor.

The average annual temperature in the Boiling Springs area is about 61°F. Seasonal temperatures range from July averages of 78° to 80° to January averages of 42° to 44°. The average length of the freeze free season is between 210 and 220 days. This "growing season" usually begins with the last freeze which occurs around April 7 and concludes with the first freeze which occurs around November 1.

Annual precipitation averages about 48 inches with the heaviest rainfall occurring in the months of July and August. The rainfall during this period is around 5.9 inches per month, whereas, during the driest months (October and November) the average monthly precipitation is nearer 3.1 inches.

UNDEVELOPED LAND

There is a considerable amount of vacant and undeveloped land within the corporate limits of Boiling Springs. This includes farmland, woodland, unused lots, and creek bottom land. The town is divided into four quadrants and three of these areas have large expanses of vacant land.

Large vacant areas are located in the southeast, southwest, and northwest sections of the town. The northeast section is by far the most developed. These undeveloped areas (each over 200 acres in size) are devoted almost entirely to farm and woodlands. Little access is afforded to this area since it is not served by any through streets or roads. Before any urban development can occur in these areas, there must be some access made available. One of these vacant areas is in the Gardner-Webb section of town. The college, which owns a large portion of the area, has ample space to expand its facilities.

Orderly expansion of land uses will prevent expensive utility problems for a community. It is unnecessarily expensive for a town of Boiling Springs' size to extend water and sewer lines and provide other facilities into areas or beyond vacant parcels of land. The town cannot construct and maintain services through undeveloped areas which neither use or pay for the conveniently located facilities which traverse them.

Undeveloped land occupies the largest amount of acreage in the planning area. Within the town limits approximately 1,623 acres of land are classified as undeveloped. This is over 80% of the total land acreage in the town. Within the one-mile perimeter area, where a vast majority of undeveloped acreage occurs, approximately 5,790 acres, or 96.1% of the total acreage, are devoted to farmland and undeveloped acreage.

SOILS

Soil is formed from its parent rock, and molded by climate, organisms (mainly vegetation), relief, and time. Soil characteristics are an important variable that must be considered when seeking to determine the suitability of land for urban development. It is important to know the texture, structure, consistency and drainage of soil in areas where buildings will be erected, streets constructed and excavations made for the laying of utility lines. Expensive mistakes can be avoided if it is known how well the land can support the activities. This section is written to provide the reader with a basic introduction to these characteristics in Boiling Springs and the area that surrounds it.

The soils in the area are predominately of the Cecil Sandy Clay Loam and the Cecil Clay Loam varieties. These groups are commonly known as "red" or "gray" soils. Small pockets of Cecil Stony Loam and Cecil Fine Sandy Loam can also be found in the area. Most of the Cecil soils have only slight to moderate limitations for such urban uses as septic tanks, roads and streets, and general residential, commercial and/or industrial construction. Soils that are found in the planning area are listed and discussed as follows:

TABLE 7 SOILS - BOILING SPRINGS PLANNING AREA

Cecil Stony Loam	grayish-brown to reddish-brown in color. Found in small pockets throughout the county. Contains many rocks and fragments of quartz, mica, and granite. Well drained but of little importance to agriculture. Very few limitations to urban development.
Cecil Fine Sandy Loam	light brown to grayish-brown in color. Also found in small pockets in the area. Contains a considerable amount of sand. Surface drainage is good and well adapted to agriculture. No limitations to urban development.
Cecil Sandy Clay Loam	commonly called "mixed gray and red land." Predominant in planning area -- especially the fringe area. Erosion is serious in several areas. If in mild topography, this soil is suited for agriculture and is also generally used as pastures and forests. Few limitations to urban development.
Louisa Loam	only found in the southwestern fringe area. Yellowish brown to reddish brown in color. Small mica flakes throughout the soil. Well drained but the soil compacts after rains. No severe limitations.
Congaree Fine Sandy Loam	found along stream beds and creek bottoms and is in a semi-swampy state. Wild vegetation flourishes in this soil. This soil is always subject to overflow and should only be used for agricultural purposes. Severe limitations in septic tanks, construction, and urban development.

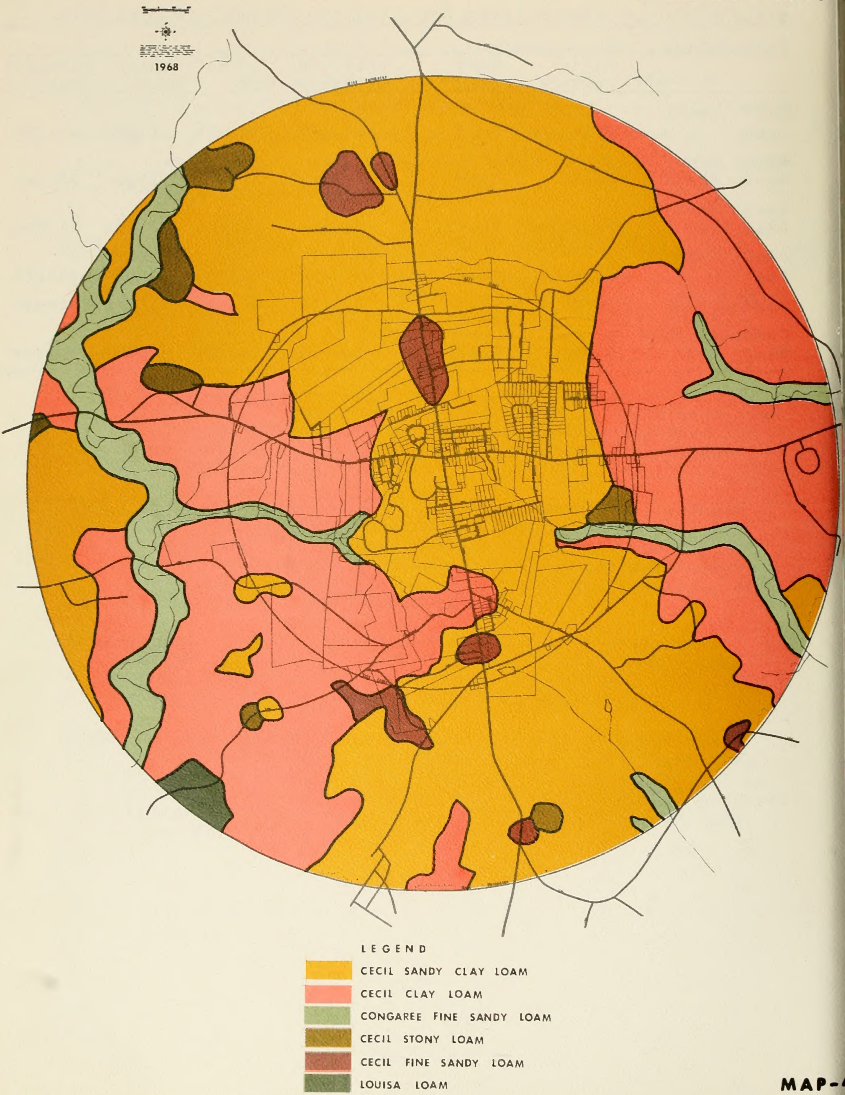
TABLE 8 SOIL SUITABILITY - BOILING SPRINGS PLANNING AREA

Description	Suitability					
	Agriculture	Woodland	Road Construction	Industry	Septic Tanks	Basement Constr.
Cecil Stony Loam	Fair	Good	Slight	Slight	Slight	Slight
Cecil Fine Sandy Loam	Good	Good	Slight	Slight	Slight	Slight
Cecil Sandy Clay Loam	Excellent	Excellent	Slight	Slight	Slight	Slight
Cecil Clay Loam	Good	Good	Slight	Slight	Slight	Slight
Louisa Loam	Good	Good	Slight	Slight	Slight	Slight
Congaree Fine Sandy Loam	Good	Good	Severe	Severe	Severe	Severe

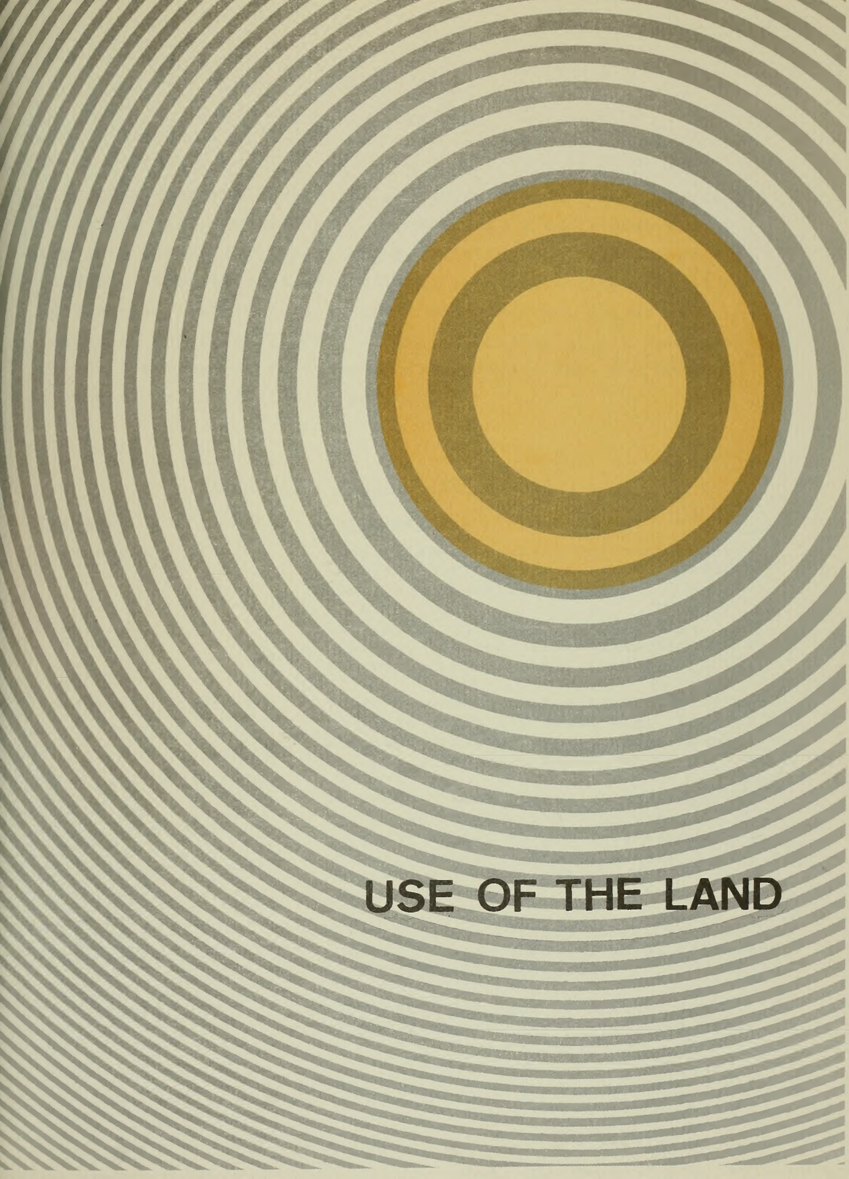
BOILING SPRINGS

NORTH CAROLINA

GENERALIZED SOILS MAP



MAP-



USE OF THE LAND

CHAPTER IV

THE USE OF THE LAND

Land uses are merely the activities which take place upon any given land. These are categorized by a functional grouping into workable classifications. In the Boiling Springs planning area the uses were divided into classifications of residential, manufacturing, trade and services, social and cultural, and undeveloped. A detailed survey of all land uses within the area was conducted in September, 1968, and measured according to the following system.

LAND USE CLASSIFICATION SYSTEM

Category	Types of Uses
Residential	Single-family houses, duplexes, multi-family dwellings, rest homes, mobile homes and vacant dwellings.
Manufacturing	Manufacturing plants, processing, milling, ginning, and wholesaling and warehousing establishments.
Trades and Services	Trade: commercial businesses offering tangible goods for sale, e.g., service stations, grocery stores, department stores, automobile sales, etc. Services: similar to trade category, except of an intangible nature. Includes barber shops, insurance, banking, doctors' and attorneys' offices, municipal offices and facilities, etc.
Public and Semi-Public	Public and semi-public lands, such as schools, playgrounds and parks, theaters, libraries, churches, etc.
Undeveloped	Structures and land in agricultural or woodland use, lakes and water areas.

The above land uses categories are treated separately in the succeeding analysis. In each discussion, principal emphasis is placed upon the distribution, size, percentage of developed land, and significance of each respective category of land use. The Existing Land Use Map depicts these land uses in a generalized graphic form.

TABLE 9 EXISTING LAND USE STATISTICS, BOILING SPRINGS, 1968

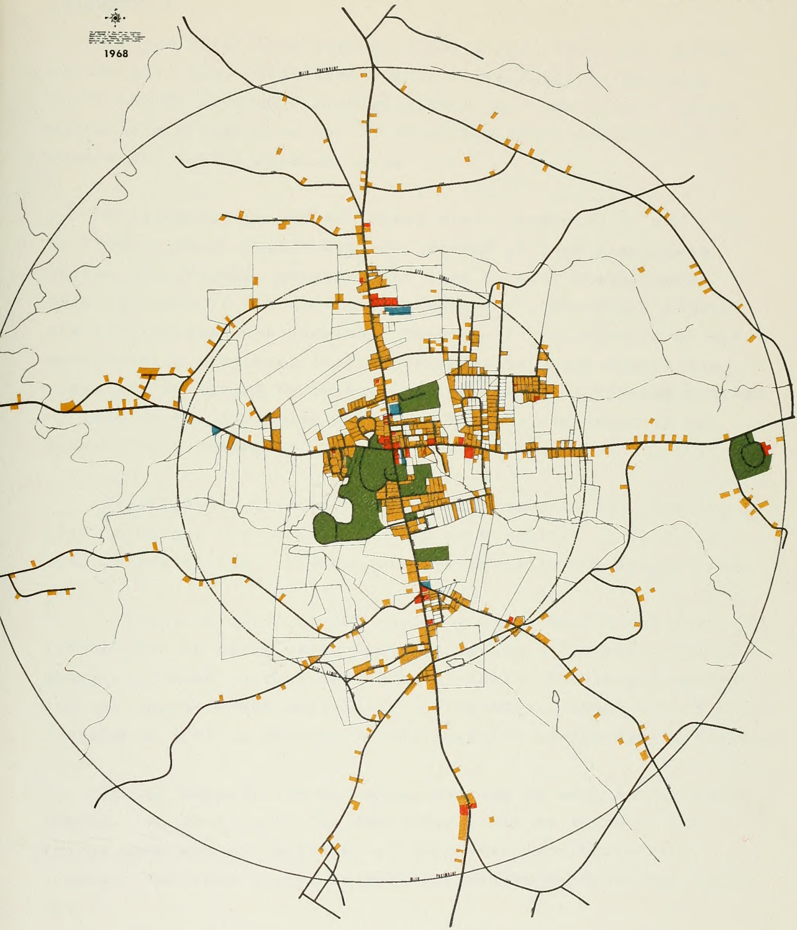
Land Use	Town Area		Fringe Area		Planning Area	
	Acres	Per Cent	Acres	Per Cent	Acres	Per Cent
Developed Land	387.0	19.2	239.5	3.9	626.5	7.8
Undeveloped Land	1,623.0	80.8	5,789.5	96.1	7,412.5	92.2
Total Land	2,010.0	100.0	6,029.0	100.0	8,039.0	100.0
		Per Cent of Land in Use		Per Cent of Land in Use		Per Cent of Land in Use
Residential	133.0	34.4	102.0	42.6	235.0	37.5
Manufacturing	7.0	1.8	0.0	0.0	7.0	1.1
Trade and Services	15.5	4.0	3.0	1.3	18.5	3.0
Public and Semi-Public	122.0	31.5	0.0	0.0	122.0	19.5
Transportation (Roads)	109.5	28.3	134.5	56.1	244.0	38.9

Source: Division of Community Planning

BOILING SPRINGS
NORTH CAROLINA

1968

GENERALIZED
EXISTING LAND USE



LEGEND

🟧 RESIDENTIAL
🟥 TRADE and SERVICES
🟩 PUBLIC and SEMI PUBLIC
🟦 MANUFACTURING
☐ UNDEVELOPED

MAP-5

RESIDENTIAL

Of the total land area of 8,039 acres, 235 acres are in residential use. This dominant land use category includes 34.4% of the developed acreage within the town limits, 42.6% within the fringe area and 37.5% of the total developed land within the entire planning area.

Residential growth has taken place generally in the form of "ribbon development" from the center of town along Main Street and College Avenue. The most obvious exception to this is found in the northeast quadrant of town where several new subdivisions are located. This quarter of town is by far more densely developed than other areas in that almost two times the number of homes are located there. A sizable portion of land in the southwest quadrant, however, is taken up by Gardner-Webb College.

Practically all residential development in the planning area is within the confines of the town limits. In fact, no sizable residential subdivisions are found in the fringe area.

There is a total of 399 dwelling units within the town limits, and of these, only four are vacant. Fourteen mobile homes are found in town and 20 multi-family dwellings, excluding the Gardner-Webb dormitories. Therefore, about 95% of all housing in Boiling Springs is designed for single-family living.

In the one-mile fringe area, housing is much less concentrated. In fact, only 204 dwellings could be found in the fringe area and the majority of them were farm and tenant houses. The town is extensively surrounded by farms and woodlands.

Housing is well spaced in the town with better than average size lots. There has been practically no encroachment of other land uses into residential areas with the exception of one area on South Main Street at the Riverside Avenue intersection. Strip commercial development is non-existent in the entire planning area. The following three classifications were us ed in a visual external survey to determine housing conditions in the town:

Sound: needing only minor repair, if any.
Deteriorating: salvagable, but needing major repair.
Dilapidated: economically unfeasible to repair.

Of the 399 dwellings in town, 344 were classified as sound, 43 as deteriorating, and 12 as dilapidated. Boiling Springs has an abundance of well maintained and expensive housing units, and for the most part, few substandard dwellings. Most of these substandard houses are occupied by Negroes and are located in the fringe area. However, the town does not contain any slums or blighted neighborhoods.

Preventive and corrective measures should be officially adopted and judiciously enforced to check the initial conception and rapid spread of any blighted growth. There is no certain solution to cure all existing or threatening blight problems, deteriorating or dilapidated structures, and substandard neighborhoods. However, local codes, zoning ordinance adoption, dedicated enforcement, comprehensive planning, clean-up and fix-up programs, building inspections, condemnation proceedings, subdivision regulations, clearance, educational programs and a public commitment to the revitalization of Boiling Springs can and will ultimately shrink existing residential deterioration in size and scope.

MANUFACTURING

The only manufacturing concerns in the planning area are Cleveland Sandwich Company, Michael Yarn Mills, Inc., Glenn Lumber Company, and a septic tank company which is located on West College Avenue. All of these companies are located within the corporate limits and are well scattered. These plants are on adequate sites with room for parking and future expansion.

Only seven acres are devoted to this type use. This comprises 1.8% of the developed land in the town. No manufacturing uses were found in the one-mile fringe area.

TRADES AND SERVICES

Boiling Springs has several small businesses and services, mostly confined to the downtown area. This type of land use includes service stations, food and drug sales, restaurants, apparel shops, offices, banks, and other such establishments.

A small, well located trade and service area can help to make a community of Boiling Springs' size more viable and compact by making convenient certain essential goods. If these stores have good access and plentiful parking, and if they present a reasonable appearance together with being compatible to surrounding uses, they become invaluable to the community. If these stores lack these qualities, however, they will only add to any congestion and discomfort that already exists. The former appears to be the case in Boiling Springs. However, if the town and college continue to grow, and the trade and services do not mature accordingly, the latter will most likely occur.

Fifteen and one-half acres of trade and service uses presently exist within the town limits and approximately three acres are in use throughout the fringe area. This amounts to about 4% of the town's developed land.

PUBLIC AND SEMI-PUBLIC

Public and semi-public uses are those which usually contribute to the well being of Boiling Springs. Public uses include property such as schools and ball parks. Semi-public consists essentially of public uses or services rendered but usually owned by private citizens or corporations. Such uses could include the churches, Gardner-Webb College, the hospital.

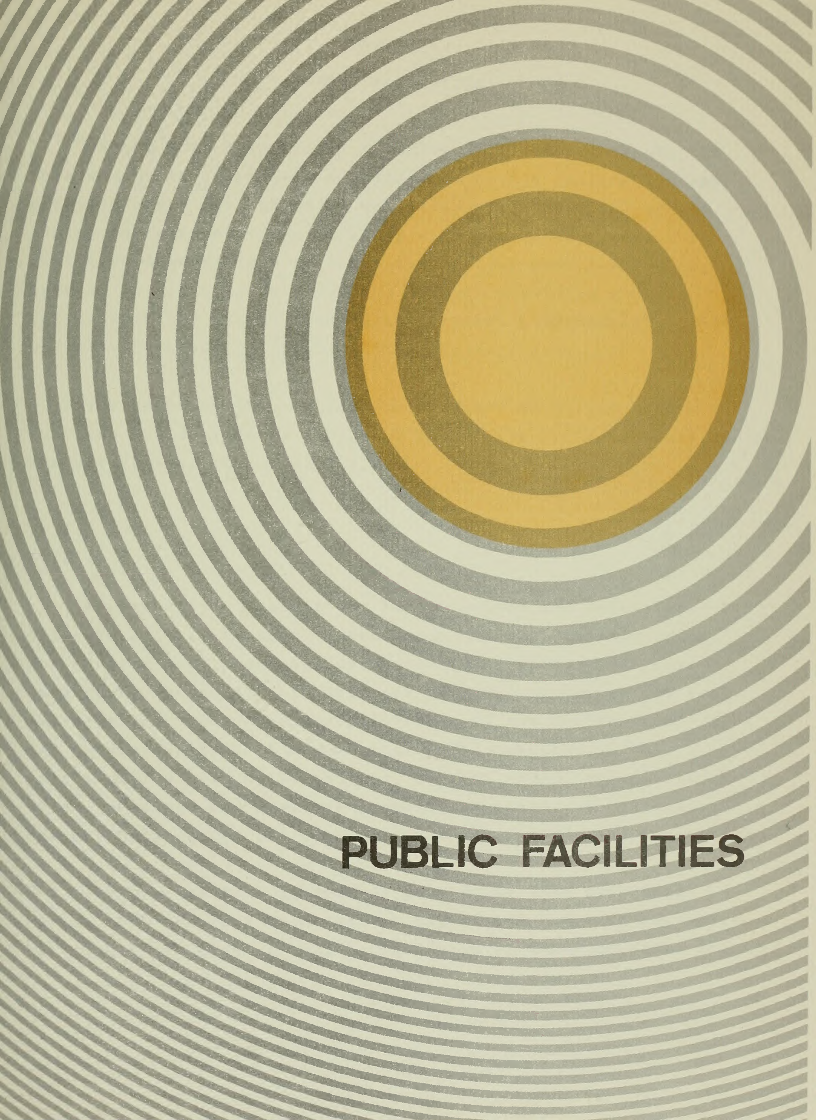
Within the town there are approximately 122 acres used for this category. This represents about 31.5% of the town's developed land. No public or semi-public uses are in the one-mile fringe. The apparent reason for the large acreage in this category is the presence of the college.

These uses have a significant affect on the character and quality of life in a small town. Since they are for the benefit of groups of people, they should be conveniently located, and as a general rule, such has been the case in Boiling Springs.

The biggest problem area in this category seems to be the lack of recreational facilities such as public parks or playgrounds apart from those offered by the school grounds.

TRANSPORTATION

Streets and roads rank high in total acreage of all the developed land in Boiling Springs. Approximately 109.5 acres, representing 28.3% of the developed land in the town, are devoted to this use. In the fringe area 244 acres are in streets and roads. This represents 56.1% of the one-mile area's developed land. Qualitative comments about the area's street system appear in the next chapter.



PUBLIC FACILITIES

CHAPTER V

PUBLIC FACILITIES

Of the many purposes of a public facilities chapter, the following a re of primary significance to the Boiling Springs planning area: (1) surveying existing facilities; (2) outlining current deficiencies along with projected needs; (3) making recommendations to alleviate current problems and to prevent or minimize future ones; and (4) providing a basis for coordinated planning among the various governmental, civic and private agencies in the Boiling Springs area.

The scope of this chapter is designed to include those services and facilities that provide for the public welfare of the citizens of the community.

WATER

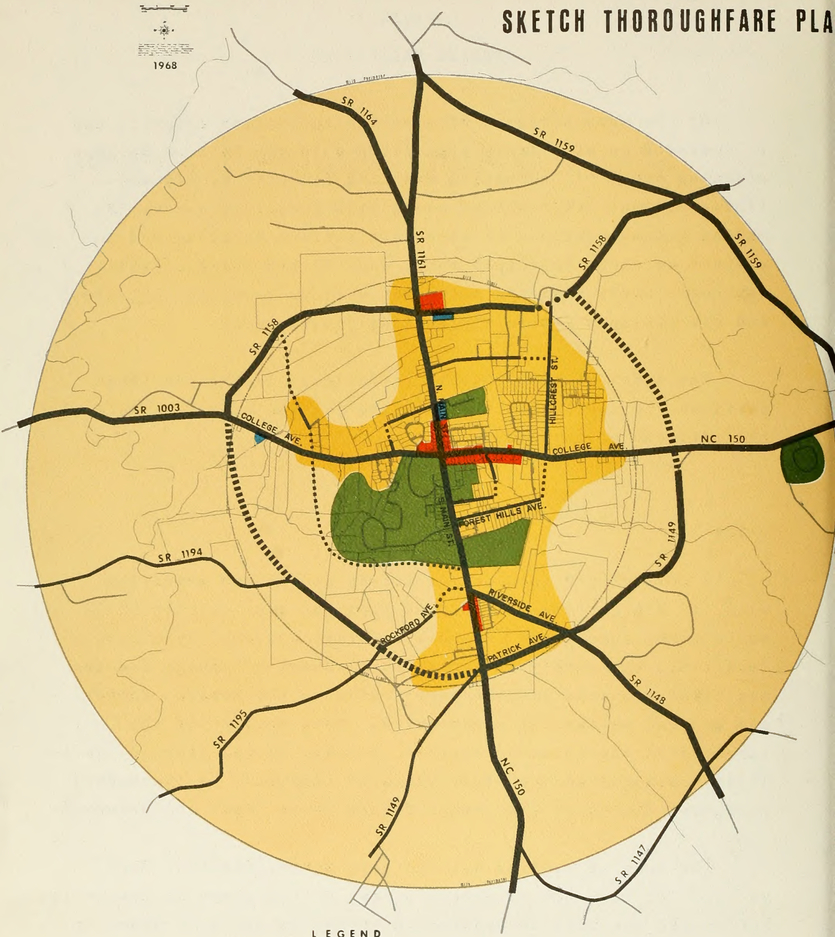
A community's chances for future growth and expansion will, in a great measure, depend upon the availability of an ample water supply and adequate sewerage system. Even more important, the supply of water and disposal of sewage are two municipal services fundamentally basic to the health, comfort and general welfare of a community. This section of the report will survey water sources, supply, yield, storage facilities, chemical and physical property analysis. A concluding paragraph discusses the town's future water needs and prospects.

The town of Boiling Springs gets water from four deep wells. The town has no meters on any of the pumps at the wells, but checks are made at regular intervals by means of drums or

BOILING SPRINGS
NORTH CAROLINA

LAND DEVELOPMENT
AND
SKETCH THOROUGHFARE PLA

1968



LEGEND

RESIDENTIAL

🟨 LOW DENSITY

🟨 MEDIUM DENSITY

🟥 BUSINESS

🟩 PUBLIC and SEMI-PUBLIC

🟦 MANUFACTURING

EXISTING		PROPOSED – LONG RANGE
───	MINOR THOROUGHFARES OR LOCAL ACCESS STREETS	••••••••••
━━━	MAJOR THOROUGHFARES	●●●●●● ▮▮▮▮▮▮▮▮▮▮

buckets of known capacity. Due to this lack of metering equipment, no accurate means is available to the consulting engineers to determine maximum daily consumption. Information in this section was taken from data in the consulting engineer's report[1] to the Town Board. Other facts have been supplied by the Water Works employees. Recommendations in this section should be viewed as general planning recommendations and not detailed engineering recommendations.

The town's water filter plant, which has a treatment capacity of 200,000 gallons per day, is located behind the Post Office. Distribution of water is by pressure created by a 75,000 gallon elevated storage tank. This elevated tank is located at the filter plant. Pressured water is distributed to users by a network of water mains that, for the most part, are six inches in diameter. A ground storage tank with a 400,000 gallon capacity is also located at the filter plant.

Approximately 90% of all the residents within the town limits are served by this system. Average daily consumption is estimated to be 100,000 gallons. The average daily water consumption per capita is estimated to be 75 gallons per person per day. This figure is somewhat low when compared to the national average of approximately 150 gallons.[2] It must, however, be borne in mind that Boiling Springs has no large industrial users of water and only a few relatively small commercial users.

By 1988, however, the average daily consumption in the town will probably be increased to 100 gallons per person.

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[1] Report on Addition to Sanitary Sewerage System for Town of Boiling Springs, N.C., E. B. Stafford, Consulting Engineer, Statesville, N.C., January 1, 1966.

[2] Principles and Practice of Urban Planning, The Municipal Management Series, International City Managers' Association, Washington, D. C., 1968, p. 232.

This figure includes both an increased rate of usage, plus an allowance for water needed for fire protection. This means that by the end of the planning period, approximately 470,000 gallons of water per day will be needed in Boiling Springs for its anticipated 1988 population of 4,700 residents.

There is no accurate way to determine if the existing wells can produce that much water. It is estimated that if they were pumped 24 hours a day they would yield over 500,000 gallons per day. It is, therefore, obvious that additional wells will be needed; the 200,000 gpd treatment plant will have to be expanded to 500,000 gpd and the storage facilities enlarged -- but not before a detailed engineering study has been made.

RECOMMENDATIONS

1. The town should contract with an engineering firm to accurately map and evaluate the existing water system. There is at present no map of the system. The only person familiar with the system is a town employee who has committed it to memory.

2. All water lines less than six inches in diameter should be replaced. Lines of this size do not permit enough water to pass through them to adequately supply the town.

3. All deadend lines should be connected into a gridiron water system. Proper water circulation would be increased by this action. If deadend lines have to remain, they should be replaced with no less than eight inch pipe.

4. Additional wells will probably be needed by the end of the 20-year planning period. Tests should now be run and the sites now selected and purchased for future use.

5. The town should adopt subdivision regulations to insure that adequate water and sewer lines are installed in any future subdivisions.

SEWERAGE SYSTEM

Prior to 1969, the town had a small sewerage collection which served a portion of the part of town situated in the western drainage area, which portion included the campus of Gardner-Webb College. Sewage was collected and treated by a septic tank which was installed around 1932. This tank was severely overloaded and evidently producing an effluent with a high BOD.[1]

It is estimated that approximately 500 persons, not including the college, were contributing waste to the old sewage system. The entire eastern half of the town was without any public sewerage system. Waste disposal in that area was by means of individual septic tanks.

An enlarged system has been designed by E.G. Stafford, Consulting Engineer, in a report dated January, 1966. Construction has now started on that new system and its completion is expected by the Fall of 1969. The old septic tank will be abandoned and a "package type" extended aeration waste water treatment plant is being constructed about one-half mile west of the town limits on Sandy Run Creek. Additional gravity lines required to deliver waste to the treatment plant will adequately provide sewerage service to the western drainage area of Boiling Springs. This plant will have a capacity to treat 100,000 gallons of sewage per day -- considerably less than the anticipated demand.

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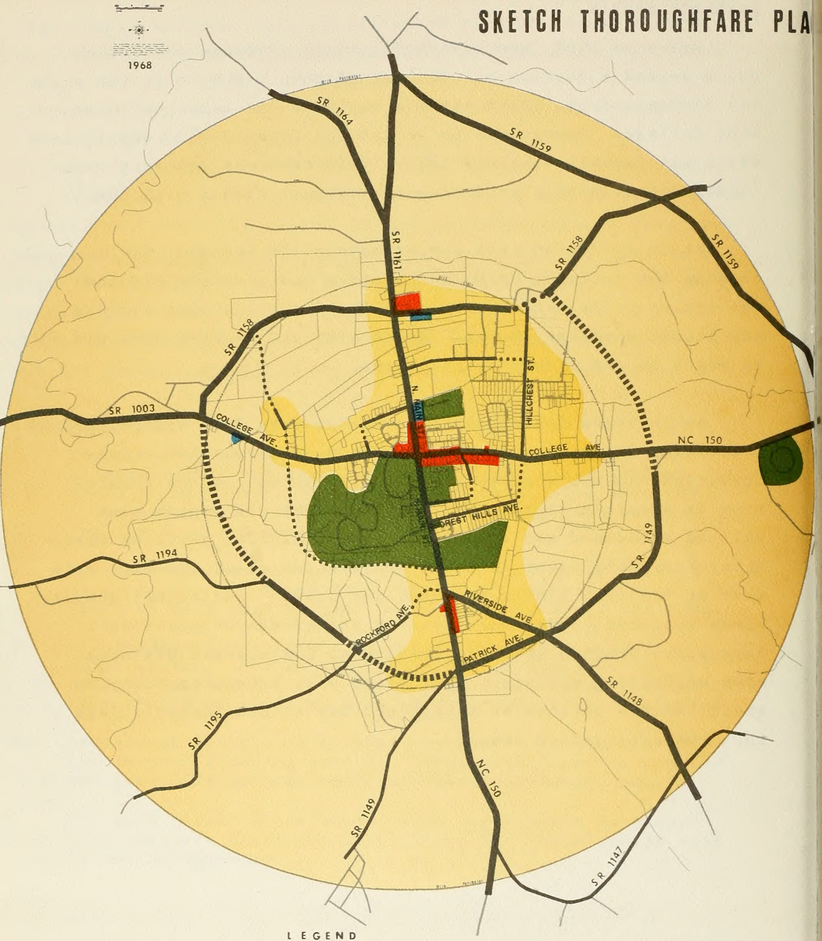
[1] Biochemical oxygen demand. This merely refers to the "strength" of sewage.

BOILING SPRINGS
NORTH CAROLINA

LAND DEVELOPMENT
AND
SKETCH THOROUGHFARE PLA



LEGEND

RESIDENTIAL
- LOW DENSITY
- MEDIUM DENSITY
- BUSINESS
- PUBLIC and SEMI-PUBLIC
- MANUFACTURING

	EXISTING		PROPOSED – LONG RANGE	
	▬	MINOR THOROUGHFARES OR LOCAL ACCESS STREETS	••••••••••	
	▬	MAJOR THOROUGHFARES	●●●●●●	▮▮▮▮▮▮▮▮▮▮

There is also being constructed a system of gravity lines in the eastern drainage area half of the town in order to serve the immediate needs of that area. A "package type" waste water treatment plant, employing the method of "contact stabilization" is proposed for treating sewage on the east side of town. Tentative capacity of the east side plant has been set at 70,000 gallons per day. A sewage pumping station, with a capacity of 75 gpm is also being constructed on the town limits line directly east of Hillcrest Street. This facility is necessary to "lift" sewage from the northeastern section of town to the east side treatment plant. The effluent from this plant will be discharged into Poplar Branch Creek.

With the construction of this proposed system, the town should have adequate sanitary sewerage service for the 20-year planning period. Unless considerable urban growth occurs in the one-mile fringe area (and that is not anticipated), it should not be necessary to extend sewer lines beyond the municipal limits during the planning period.

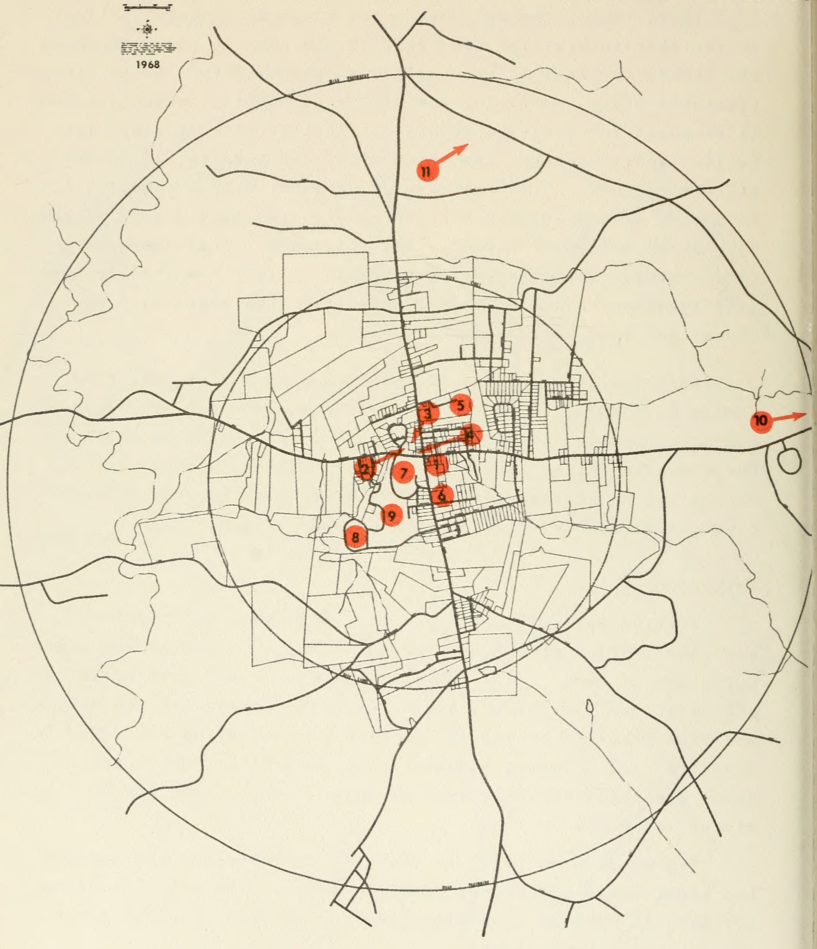
TOWN HALL

Boiling Spring's municipal building is an all-purpose, one-story, brick structure located on East College Avenue near the heart of town. This facility houses the administrative office of the Town Clerk, serves as headquarters for the police and fire departments and is the site of Town Board meetings. In addition, the building is used as an operations center for all other municipal services such as water, sewer, sanitation, street and taxes.

The structure, built in 1960, is conveniently located and has about seven off-street parking spaces. The area behind the building is used as a parking area for the town garbage truck and as open storage area.

BOILING SPRINGS
NORTH CAROLINA

EXISTING
PUBLIC FACILITIES



L E G E N D

1. Town Hall, Police & Fire Stations
2. Royster Memorial Hospital
3. Water Treatment Plant & Storage Tower
4. U. S. Post Office
5. Green Bethel School
6. Boiling Springs School
7. Gardner Webb College
8. Gardner Webb Football Stadium
9. Gardner Webb Baseball Field
10. Shelby Municipal Airport
11. Crest High School

MAP

Parking space, at present, is adequate. The building and site permit future enlargements and additional parking space. Vacant land exists both behind and to the east of the Town Hall. If that land were municipally owned, it would afford ample area for all growth during the 20-year planning period.

RECOMMENDATIONS

1. As municipal functions increase during the next 20 years, a need for additional space will accompany that growth. It is recommended that the town now purchase the vacant lots surrounding the existing Town Hall to provide the needed space for future expansions.

POLICE PROTECTION

The department is located in the Clerk's office in the Town Hall. It has one full-time employee, the Chief, who is responsible for maintaining law and order in the community. There has recently been a man on call during the weekends to assist the Chief or perform extra duty.

Equipment for this "department" consists of the Chief's own 1966 Ford (for which he is reimbursed), equipped with two-way radio on a hookup with the Cleveland County Sheriff's Department. Other items include a pistol and an assortment of related materials. Parking space is provided for the Chief in front of Town Hall.

The Sheriff's Department patrols the community on a regular basis and cooperates with the Chief in law enforcement tasks. The detention facilities in Shelby are used by Boiling Spring's Chief, though this has been seldom necessary. The

The predominant enforcement problems are those involving traffic violations and control -- especially when Gardner-Webb has a home ball game. When this occurs, the State Highway Patrol along with the Sheriff's office, assist the Chief.

The Gardner-Webb College campus has been patrolled since the summer of 1967 by Pinkerton men. By having these men, the Chief's work load has been somewhat lessened.

RECOMMENDATIONS

1. One man cannot possibly be on duty 24 hours a day, enforce laws in a land area of 3½ miles, protect 1,800 people, serve papers and handle all the necessary book work. A standard often quoted by planners is that for each 600 residents of a community there should be one police officer. This would seem high for a town of Boiling Springs' size; however, an additional officer should be employed as soon as possible to assist the Chief. This would provide more adequate protection for the citizens of the town.

2. The population projections in Chapter II estimate that by 1980, the town will have a population of 2,928. If this holds true, the town will then need a full-time police force of a chief and three officers and two police cruisers. With three other officers on the force, each could work an eight-hour day so that a man would be on duty at all times.

3. By 1988 it is estimated the town will have 4,700 persons. When this occurs the town's force should have six officers to assist the chief -- along with three police cruisers.

4. If, owing to increased growth and development, the department requires an enlarged staff, additional office space, equipment, and parking space will undoubtedly be required. At present the Police Department, lacking a detention area, separate

quarters or extensive equipment, in reality takes up no space whatsoever. During the next 20 years, this will change as the town's population more than doubles.

5. By 1980 the department will need separate office space. It is recommended that an addition be added to the rear or to the east of the existing Town Hall.

REFUSE COLLECTION AND DISPOSAL

Refuse collection is offered to all residents and businesses of incorporated Boiling Springs by the town. Service is provided to residences once a week and twice a week to businesses. Refuse is picked up at the curb in closed containers. Bulky trash and leaves are not picked up on a regular basis but rather by residents' request. In the fringe area refuse is picked up by private agencies or disposed of by residents. In fact, the rest of the County (excluding Shelby) is served by three private haulers who appear to be doing an adequate job.

Equipment and personnel consist of a 1950 vintage truck and two town employees. The two men who operate this truck also carry on other responsibilities in the town in the water, sewer and street departments.

Refuse is disposed of at an open dump area outside of the planning area. The area is nowhere close to residential development, so smoke and odor are not major problems. This will not be the case within the next decade as residential development expands into the general area.

RECOMMENDATIONS

1. The open bed truck should be replaced with a new packer-type truck; however, the older truck will still be adequate for hauling bulky trash, limbs, and leaves.

2. By 1980 the town's population will have doubled, and as a result, there will be a demand for an additional packer-truck and two part-time employees to operate it. The new equipment can still be stored behind the Town Hall. A sheltered garage will be needed to protect it from the elements.

3. The open dump should be converted into a sanitary landfill. The North Carolina State Board of Health provides excellent assistance to towns needing technical advice on the construction of such a facility.

4. The frequency of collection should be adequate during the 20-year planning period. Replacement vehicles will be needed on an average of every 6-8 years.

RECREATION

The town does not operate any recreation facilities. Several forms of recreation, including an indoor swimming pool, are made available to the town's residents by Gardner-Webb College. Other residents, mostly children, use the recreation fields at the two public schools. A private golf course is located just beyond the planning area off NC 150 near the Shelby Airport. Admittance, however, is by membership only.

Little League baseball and football teams are sponsored by several local churches or civic organizations. Swimming classes are also provided at the college for town residents. This is the extent of any organized recreation in the community.

The College provides the community several spectator sports -- especially football and basketball. The College's sports facilities are indeed an asset to the community and an enjoyment to the sports fan.

The National Recreation Association recommends one acre of recreation space for each 100 residents. This would mean the town needs 18 recreational acres at present, 30 acres by 1980 and 47 by 1988.

RECOMMENDATIONS

1. In order to provide essential playground supervision, a minimum of one playground director, one assistant director, and one recreation leader should be employed during the summer operation period for each playground. The town should therefore establish its own recreation commission within the next 20 years. By 1980 the town should have 30 acres developed for recreational use.

2. It is recommended that the Town of Boiling Springs contact the North Carolina Recreation Commission as a consultant in establishing a recreation program. This commission has an experienced staff who can assist the town in providing such services to its citizens.

HOSPITAL

In 1949 Gardner-Webb College started a medical facility in the town with the establishment of a school clinic. In 1958 a separate corporation was formed and the old clinic was converted into the Royster Memorial General Hospital. The clinic had only 12 beds and a small staff. When it became a general hospital, the corporation constructed additional rooms which brought the number of beds up to 26. During 1963, another addition was constructed and the total number of beds increased to 40. Remodeling has occurred all during the history of this facility.

The current staff consists of one intern, a gynecologist, four general practioners and two surgeons. The hospital also has about 12 registered nurses.

The occupancy rate is between 90 and 92 per cent. This is considered extremely high in that a very limited number of beds are available for any emergencies. A planning committee has been formed to study the feasibility of relocating the hospital to another site in the town. The existing site is much too small and the 60-car parking lot is inadequate.

Although the staff is considered to be adequate by the hospital administrator, the most pressing needs are the site and facility's inadequate sizes.

RECOMMENDATIONS

1. The construction of the new hospital facilities should be commenced as soon as possible. A generally accepted rule of thumb is that a hospital should have four beds per 1,000 population. On this point, the hospital is adequate but the room floor area is much too small.

STREETS

The street system is the principal means of circulation in any urban area. A transportation system is a large user of land and normally serves all the land uses in the community. Circulation networks not only privide a framework for land development but also influence the structure of the community's urban development to a great extent. Streets should be well located and designed efficiently to function properly. They must be flexible so as to serve a multitude of complex purposes. Once in place, a transportation facility is quite difficult and obviously very expensive to move.

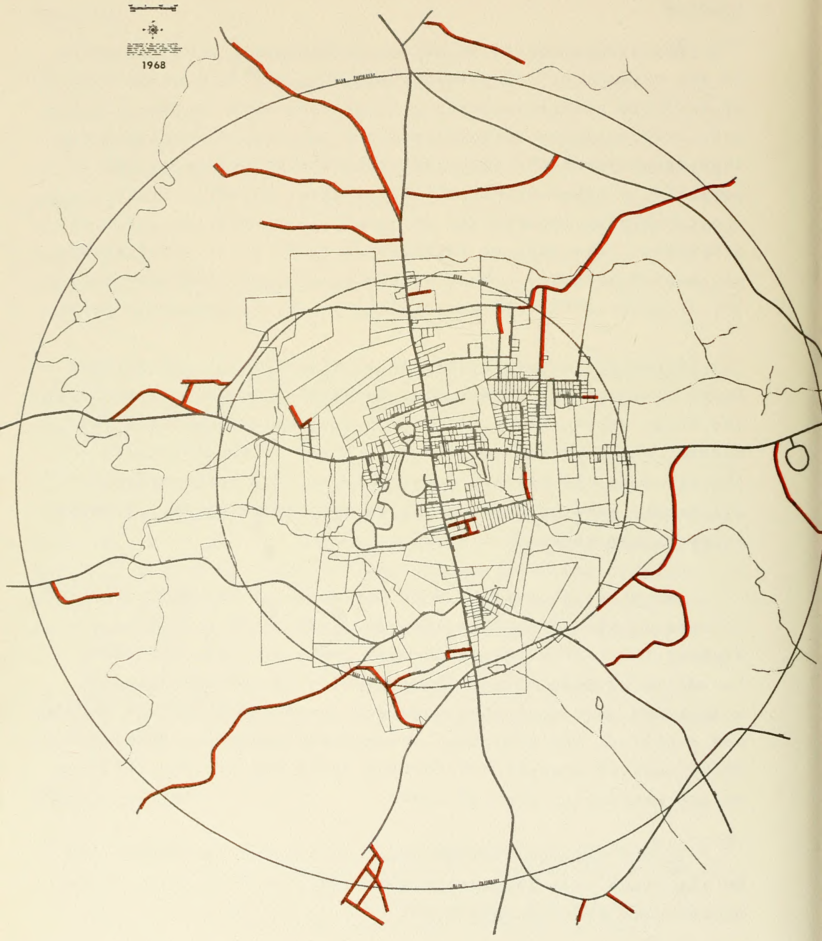
Since the street system of Boiling Springs, as in most North Carolina towns, was designed and improved in the "horse and buggy days", there are some undesirable situations for modern vehicular movement. This enigma is substantially increased by off-setting intersections, improper street alignment, poor street design, narrow rights-of-way, deadend streets, and unpaved streets.

The State maintains about 7.4 miles of the 15.2 miles of streets in the town of Boiling Springs. North Carolina Highway 150, which passes through town, accounts for about two miles of this total. Essentially, all of the State-maintained streets in the town are paved and less than a mile and a half of the municipal streets are unpaved. Most of these unpaved streets are deadend stubs and are not confined to any particular area of town.

In the one-mile fringe area, 18.3 miles are maintained by the State. In the entire planning area 25.3 miles of the streets are State-maintained.

BOILING SPRINGS
NORTH CAROLINA

UNPAVED STREETS



1968

MAP

The Powell Bill and utility funds are used to pave and maintain the streets. Maintenance is performed by the town's Public Works Department. New streets are graded by the developer and in turn paved by the town. Street repairs are made when necessary but not to any set schedule.

The most obvious deficiency with the municipal street system is the narrow and inadequate rights-of-way on many of the town's streets. As a result, approaching automobiles cannot pass each other without moving off the pavement. This, of course, is an obvious danger. Some examples of narrow streets are Branch Avenue, Hillside Street and Hamrick Avenue.

OTHER FACILITIES

Traffic

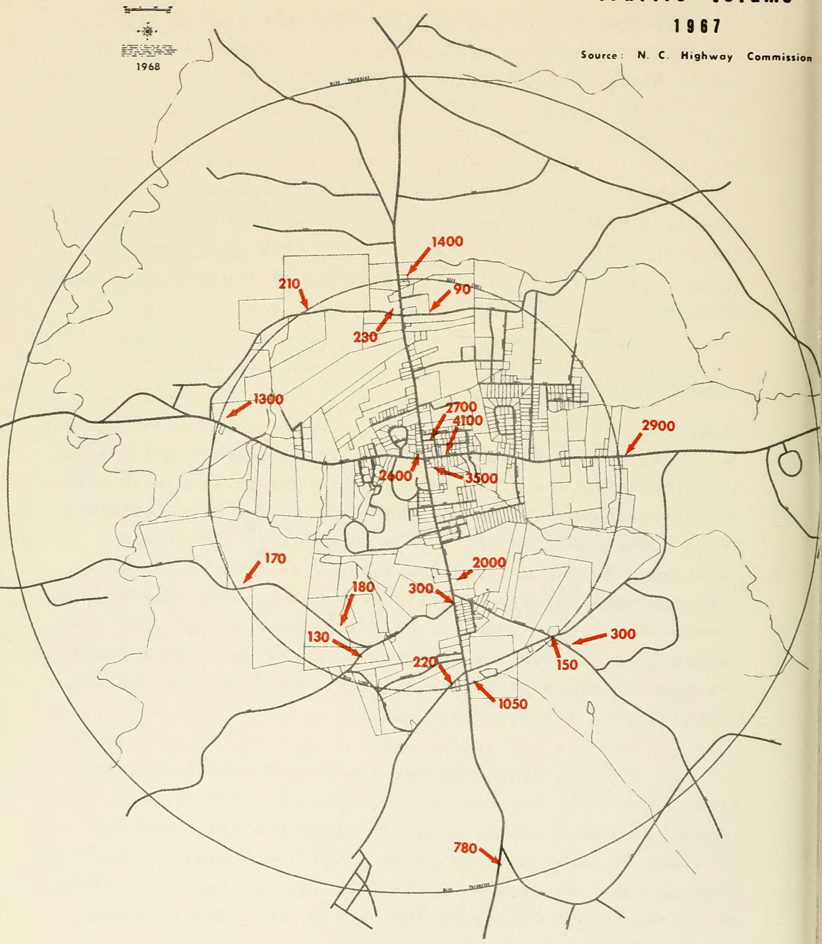
The volume of vehicles using the streets is a significant factor in the planning program. Unless carefully planned, traffic can congest at strategic points in a community causing serious "tie-ups." The circulation of vehicles entering, leaving and passing through certain points of a town are measured by traffic counts. The State Highway Commission utilizes traffic volume counts to assist in the complicated process of thoroughfare planning. These counts are made at varying intervals and averaged for the typical 24-hour daily total.

In 1967 the State Highway Commission conducted a comprehensive count for the Boiling Springs planning area indicating the heaviest concentration of traffic volumes. As might be expected, the major stream of traffic flows along Highway 150. Average daily traffic volumes reach a maximum of between 2,500 and 4,100 vehicles at the town's College Avenue and Main Street intersection.

BOILING SPRINGS
NORTH CAROLINA

Average Daily
Traffic Volume
1967

Source: N. C. Highway Commission



MAP

The major traffic generator in the area is Gardner-Webb College in that a large number of "day students" commute to and from school by automobile. This situation creates a rather heavy traffic load along Main Street and College Avenue. Other streets in town have only a minimum of traffic. There is. however, a sizable number of automobiles in transit which pass through the town and do not stop. Recommendations for the improvement and expansion of the circulation system will be found in the Thoroughfare Plan in Chapter VI. Traffic flow in 1967 is shown on Map 10.

Street Signs and Signals

Most of the streets in the town are well marked as to street names; however, a good many of these markers are in need of fresh lettering and painting. The Gordon Avenue and Lawhon Street areas are without any street name identification markers as are several short unnamed deadend streets.

The presence of stop signs and other such safety indicators are erected to protect motorists. For the most part, such signs are adequate throughout the planning area; however, stop signs are needed at Cantrell Street where it intersects with West College Avenue. A stop sign should also be placed at the intersection of an unnamed street (150 feet east of Cantrell Street) and West College Avenue and another one at the intersection of Beason and Wall Streets.

The only traffic signal in the planning area is located at the town center (College Avenue and Main Street intersection). At this time, that signal appears to be adequate for the town; however, a flashing caution signal should be placed at the intersection of Highway 150 and Rockford-Riverside Avenues.

Street Lights

Street lighting in Boiling Springs is adequate. Approximately 100 street lights are located on all the densely developed streets of the town. These mercury lamps are located at street corners and in the centers of long blocks. A higher level of lighting is provided in the business district by the use of higher capacity lamps and closer spacing. The town's lighting system was increased considerably in 1967. An area which is deficient in street lighting can be found along Pineland Avenue.

Intersections

All but a few of the street intersections in the town are at 90° angles. This type of intersection is recommended for both safety and better vision. All intersection areas should be free of shrubbery, trees, parking and other such obstacles which would prevent a clear vision path. Problem intersections in the area are as follows:

1. Intersection of SR 1158 and West College Avenue at the town's limits. Poor visibility due to a hill and a curve.
2. Intersection of Gordon Avenue and North Main Street. Poor visibility due to dense shrubbery.
3. Intersection of North Main Street and SR 1158. Parking should not be permitted between the gasoline pumps and the street in front of Hamrick's store. At present such parking prohibits a clear line of vision.
4. Intersection of Hillcrest Street and East College Avenue. Poor visibility due to a hill and curve.
5. Intersection of South Main Street with Riverside and Rockford Avenues. Poor visibility due to a hill, and hazardous because the avenues are off-setting and acute angled with South Main Street.

Sidewalks

The Boiling Springs sidewalks are confined to the business district. They run from the center of town north for 500 feet; east to the Town Hall; south to the College Stadium Road, and west to the hospital. A sidewalk, although poorly maintained, can be found along Green Street.

Sidewalks are necessary for safe, convenient pedestrian circulation. The needs for sidewalks vary with the amount of auto traffic on the street, the character of the uses along the street demanding local pedestrian traffic, and the general pedestrian traffic through the area.

Provision and maintenance of sidewalks outside the business area is generally the responsibility of the owner or occupant. This policy has led to the ommission of sidewalks in the residential districts of the town where owners or developers did not install them because of the cost. Areas which need sidewalks presently are along East College Avenue to Fairview Street and north along Main Street to Bethel Street.

Curb and Gutters

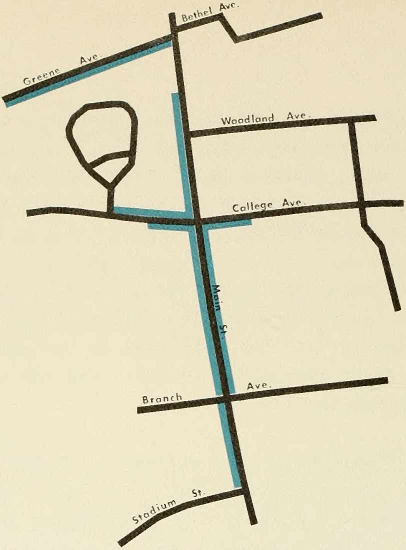
Curb and guttering in the town can generally be found along the same areas as the sidewalks -- along Main Street and College Avenue. Asphalt guttering is also located along a portion of Gordon Avenue.

Curb and guttering is desirable for the adequate runoff of surface water. Without some type of guttering system, storm water will cause flooding and erosion. At present, this occurs at the intersection of Fairview Street and East College Avenue; along Forest Hill Avenue, and along Cantrell Street at the Scout Hut.

SIDEWALKS

N

SCALE 1" = 800'



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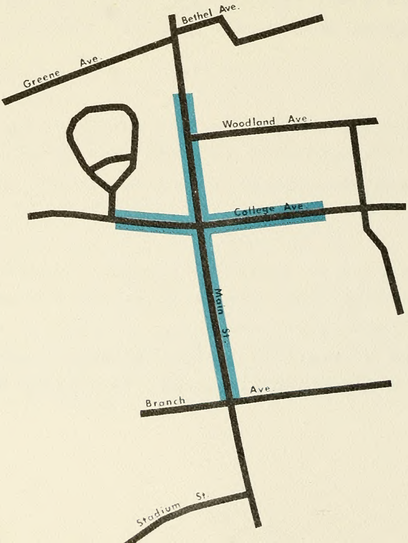
CURB & GUTTERIN



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THE COMPREHENSIVE PLAN

CHAPTER VI

THE COMPREHENSIVE PLAN

The Comprehensive Plan for Boiling Springs will specifically identify the most appropriate areas for future industrial, commercial and residential development. It will show the most desirable sites for future recreation areas and other community facilities. The plan also proposes a system of roads designed to relieve present traffic congestion and serve the proposed development growth pattern.

Since the life of a town is by nature complex, planning its future requires a maximum of care in study and organization. General objectives are reasonably clear: the town is to be a better place in which to live. How to achieve this is less clear. The method of study employed in the preparation of this report has been:

1. Survey, to uncover pertinent information about the Town of Boiling Springs;
2. Analysis, to derive the meaning of the future from that which exists today;
3. Formulating, to specify goals which may be achieved in the future;
4. Demonstration, of how these goals can be realized;
5. Recommend action, to achieve these goals.

The planning area, as stated in the previous chapters, is the town's incorporated area plus the one-mile fringe area which may be controlled by Boiling Springs through extraterritorial zoning.

The planning period is a twenty-year period from the present to 1988. It is felt that this is a long enough span for most of the recommendations of this report to be carried out. However, the year 1988 is not a target date for a static occurrence but rather a data attached to make the plan more comprehendable and to put the goals into perspective.

THE LAND DEVELOPMENT PLAN

Theoretically, any community can arrange the land uses ideally. Through reasonable composition of physical elements, the most desirable qualities of a community -- for living, working and trading -- can be obtained. However, since no single composition is suitable for every kind of community, and since communities have a habit of evolving from one type to another, ideal arrangements are very difficult to achieve. Nevertheless, before any attempt is made to outline desirable development for the town of Boiling Springs, it will be appropriate to consider the most ideal standards for each of the major aspects of community life.

Location Standards

The following are general principles to be followed in determining location standards.

1. An effort must be made to attain a degree of compactness of development. New development should be encouraged in areas contiguous to existing development because of the added efficiency of providing municipal services -- that is, requiring the fewest additional treatment plants, pumping stations, and the least additional feet of water and sewer lines, etc.

2. The concept of functional units should be introduced into future development and encouraged in existing land use. Therefore, the central business district (inasmuch as possible) should be a single unit rather than a series of facilities strung out along public rights-of-way. The neighborhood unit concept should be used extensively in planning for residential areas so that identifiable areas, separated by topography, major thoroughfares or open space, will develop around a focal point such as a school, recreational area, or business area.

3. Adjoining land uses should be compatible and where uses might affect one another adversely, buffers (such as landscaping or planned planting) should be used to separate these uses as much as possible.

4. Design of development should be functional in that large traffic generating uses such as the College, retail trade and multiple-family dwellings should be located adjacent to major thoroughfares, while single-family residential areas which generate less traffic should, as much as possible, be located away from the major traffic generating activities.

5. Unpleasant uses such as heavy industry, outdoor advertising signs, the refuse dumps and sewage treatment plant should be located away from densely populated areas and should be situated such that the prevailing winds will carry their smoke, noise, and odor away from the urbanized areas.

6. Places for living (residential communities and their accessory activities such as playgrounds, schools, etc.) should be convenient as possible to all other activity areas. They should be convenient to regional recreational areas and should include small neighborhood recreation areas within themselves. Living areas should be varied in terms of type and density of development, thereby affording a range from rural-agricultural to apartment environments.

7. Places of work (those parts of the town devoted to manufacturing, trade and services) should be convenient to living areas and sited on major thoroughfares which afford easy access. They should be located near other work areas, especially when the types of work performed are related. Work area sites should provide all utilities and be located in a close proximity to regional transportation facilities.

Space Requirements

Generalized location of varying types of activity are desired according to the preceding principles and standards. Once the "where" of land allocation has been determined, the "how much" must be ascertained.

The first step in estimating space requirements involves a review of existing characteristics of development to determine where uses are cramped for space and where past location of uses has resulted in efficient use of land. As a general rule, a commercial and industrial development becomes cramped for space as a town grows. It therefore "over uses" its land to the extent of pushing its related activities such as parking and loading into public thoroughfares. Such a pattern of past development has resulted in a trend (on the part of trade and industry) toward spreading out in a low density industrial park or shopping center type of development.

On the other hand, residential areas are traditionally wasteful of land, with little used yards and vacant lots often preventing the development of large centralized neighborhood residential areas with ball parks and playgrounds.

From a study of past development trends, more "modern" space requirements were derived for each specific land use. These requirement standards were then applied to projected development demands which were derived from projected population and economic growth.

Finally, the demand for space was balanced against the supply of land. The supply which meets locational requirements has been categoried for each use.

Future Land Use Projections - Incorporated Area

The projection of future land use requirements is not an exact science but is an "educated guess" based on past trends. Land use requirements for the projected population gains are added to the present land use deficiencies, if any, and the net result is the acreage requirement by land use categories for the planning period.

The technique used to determine Boiling Springs future land use requirement was the "acres per hundred method". Table 10 shows that 638 acres of land to develop will be need-to accommodate the 2,900-person increase in population that is estimated for the present incorporated area between 1968 and 1988. This increase includes future acreage needs for all land use categories based on the minimum population projected. However, 655 acres have been programmed for future land use needs because there is a good possibility the population will be much larger. This, however, will depend upon the college and its willingness to enlarge.

There is a considerable amount of vacant, buildable land within the present corporate limits to accommodate this growth at the same average densities which now prevail. It seems reasonable to assume that the majority of the land beyond the corporate limits (but within the one-mile fringe area) will remain undeveloped during the 20-year planning period. Therefore, acreage projections for that area are not delineated. Since this area has few public facilities, paved streets, and other such services, and because there is a large amount of vacant land within the town, it is felt that little urban growth will occur in this fringe area during the next two decades.

TABLE 10 ACREAGE PROJECTIONS, BOILING SPRINGS, N. C.

Land Use	Developed Acres in the Town	Acres per 100 Pop. at Present*	Adjusted Acres per 100 Persons Factor	Add'l. Acres Needed by 1988 2900 Pop. Increase 1968-1988	Add'l. Acres Needed by 1988 Adjusted
Residential	133.0	7.4	7.5	217.5	300
Trade and Services	15.5	.9	1.0	29.0	35
Manufacturing	7.0	.4	.5	14.5	20
Public and Semi-Public	122.0	6.7	7.0	203.0	150
Transportation (Roads)	109.5	6.1	6.0	174.0	150
Total Developed Land	387.0	21.5	22.0	638.0	655

*Estimate: 1968 population, 1,800

Source: Division of Community Planning

It is germane at this point to examine each category and give specific reasoning why the planned acreage for 1988 is higher than the acreage needed to accommodate the projected population increase by 1988.

Residential. Over 217 acres are needed to serve the expected population increase, but 300 acres have been programmed. It is felt that the programmed acreage is justified because of the large lot sizes that now prevail in the area, and that since Gardner-Webb is becoming a four-year college, the population will increase at a greater rate than expected.

Trade and Services. These two combined categories, according to population projections, will need 29 acres for expansion. However, 35 planned acres have been alloted. This additional acreage should be utilized for the additional growth of neighborhood and general businesses, off-street parking spaces, and the expansion of existing businesses.

Manufacturing. Fourteen and one-half acres are needed to serve the expected population increase, but 20 acres have been planned for by 1988. There will be some expansion of existing industries as well as some new "light" industries locating in the town.

Public and Semi-Public. Approximately 203 acres are needed to serve the expected population increase. This was felt to be rather high since a large portion of the existing developed acres in this category included the Gardner-Webb College campus. One-hundred-fifty acres should be adequate for college expansion, municipal parks and playgrounds, and other such uses during the next 20 years.

Transportation. The 174 acres needed to accommodate the population increase is considered to be more than adequate for this category. For this report, only 150 acres will be used. This acreage will be utilized by construction of new residential-subdivision streets and highway realignment and street construction as programmed in the thoroughfare plan.

The land now developed includes some small residential lots, stores without parking, and improper street design. The standard and style of development in the next 20 years will use a lot more land than the standard and style used to build the town that now exists. All of the above factors show that land use projections cannot be based wholly on population but must include growth patterns, provision of utilities, contemplated and known expansions, and street construction.

Considering all factors, it seems reasonable to program 655 acres, or approximately 40% of the total (existing) undeveloped acreage within the town for development by 1988. The fringe area is virtually undeveloped -- over 96% vacant. Little urban growth is expected in this area for sometime to come. As a result, no acreage programming is needed.

A GUIDE FOR GROWTH

Boiling Springs Land Development Plan is illustrated (Map 13) on the following page. As a guide for growth, it is the framework for the future, more detailed planning, and related policy decisions. It is the guide for enforcing a zoning ordinance and for setting up the town improvements program. The plan, which is a general plan, utilizes the following major land use classifications: residential, retail trade and services, manufacturing, and public and semi-public.

It will become the policy of the Planning and Zoning Commission to occasionally review the plan and recommend needed changes to the Town Board of Commissioners. This review, to be most effective, will occur just prior to the adoption of the town's capital improvements program and operating budget.

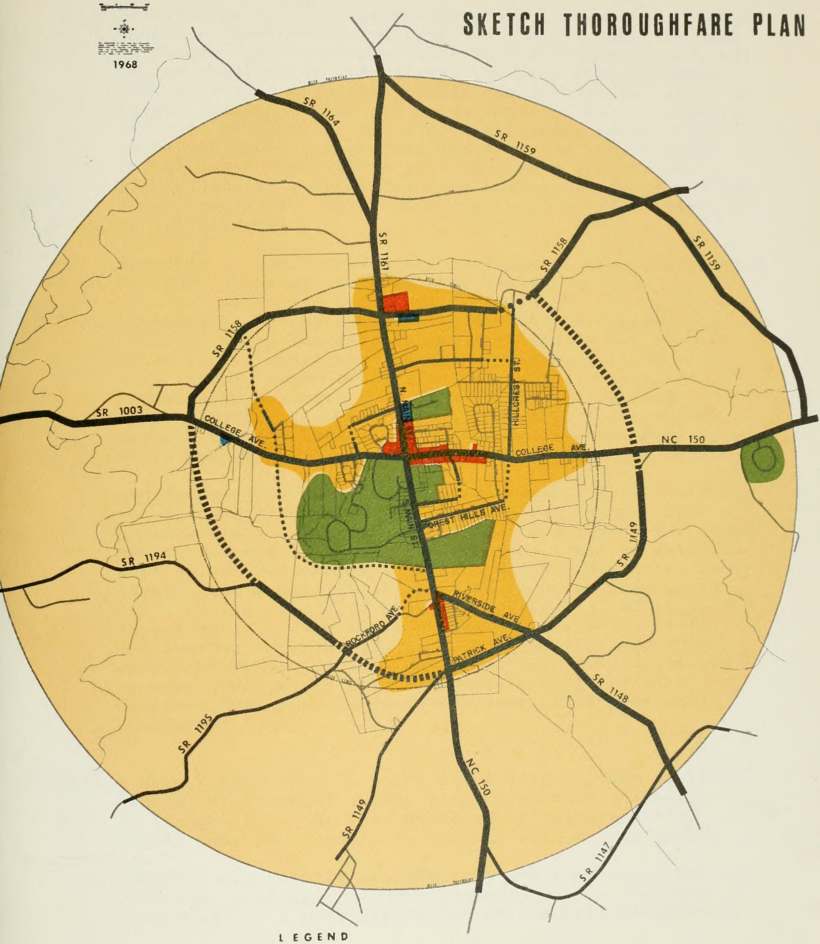
Residential Land Uses. The Land Development Plan illustrates anticipated residential growth during the planning period. In locating and delineating residential areas a number of factors were considered. The suitability of land for septic tanks was examined. Accessibility was given prime consideration, as well as the availability of town water and sewer. A primary intent is to tie small scattered pockets of development together and provide a guide for future growth.

Practically all of Boiling Springs' residential growth is concentrated within the corporate limits with some few exceptions of strip residential development along the four main roads into town. Much of the land us undeveloped; so therefore, the majority of additional residential land needed will be able to locate within the town.

BOILING SPRINGS
NORTH CAROLINA

1968

LAND DEVELOPMENT
AND
SKETCH THOROUGHFARE PLAN



LEGEND

RESIDENTIAL

- ▨ LOW DENSITY
- ▨ MEDIUM DENSITY
- 🟥 BUSINESS
- 🟩 PUBLIC and SEMI-PUBLIC
- 🟦 MANUFACTURING

EXISTING		PROPOSED – LONG RANGE	
━━━	MINOR THOROUGHFARES OR LOCAL ACCESS STREETS	••••••••••	
▬▬▬	MAJOR THOROUGHFARES	●●●●●●	▮▮▮▮▮▮▮▮▮▮

MAP-13

Boiling Springs is expected to remain, even on a broader scale, a "bedroom community". This means that the bulk of future land development, as in the current trend, will be for residential structures. Various housing needs must be met in order to satisfy the diversified scope of future residents, On one hand, there is an anticipated need for housing for the middle and upper income residents who would occupy suburban homes on larger lots. On the other hand, there will be a need for low-rent, higher density housing for both college students and low income families. This can be in the form of apartments or mobile homes.

For this reason, residential development has been planned for the following three density levels:

Low-Density. This type of residential development is located in the one-mile fringe area and is not served by municipal water and sewerage. Residential development in this type is usually single-family,detached. The minimum lot size should be 20,000 square feet (approximately one-half acre). The N.C. State Health Department recommends lots of this size when private wells and septic tanks are utilized on the same lot.

Medium-Density. The medium-density areas are located in or immediately adjacent to the city limits. Some of these areas are not served by water and sewer, but these facilities are in close proximity and could be extended without extreme expense. This type of residential area should have a density of three to five dwelling units per acre and lot sizes should range from 8,000 to 15,000 square feet. These areas contain the majority of the new housing construction in Boiling Springs and prime areas for future residential growth are also contained herein. These areas will accommodate single-family detached dwelling, duplexes and other multiple-family dwellings.

Mobile Home Parks. Mobile homes are a planned form of residential development in the Boiling Springs community. It is felt that the best means of insuring quality mobile home development is through mobile home parks.

Mobile homes provide satisfactory dwelling units and are a popular housing type when properly used. Trailers have received a poor reputation in the past because they were improperly used. Small trailers not intended as permanent housing units were used as permanent homes for families. In the past, trailers also have been placed in poor locations without sufficient parking and access and without adequate utilities. These problems can be prevented through adoption of special provisions in the zoning ordinance.

In the future, mobile homes should be located in approved "parks" or subdivisions specifically designed for them. Unit density should be near that of the surrounding neighborhood single-family housing. This will allow sufficient space for driveways, parking, and any common facilities such as a laundry and play areas. A minimum number of units in approved developments should be set to assure that the park will be large enough for proper planning and efficient administration. The most important provision should be that municipal water and sewer service is available. Regulations might also provide for permanent electrical installations, paved drives and parking areas, and landscaping.

Trades and Services Land Use. Large commercial areas are not proposed in Boiling Springs because of the close proximity of facilities in nearby Shelby.

The existing business district needs some expansion and rejuvenation. It is felt that if existing facilities were improved, increased local shopping would create a demand for expansion of business uses eastward along NC 150 (College Street) and northward along Main Street. It is further planned that such commercial activity should strive to create a "specialty" or "uniqueness" atmosphere and thus attract residents from Shelby and other surrounding areas. Some examples of such shops include a gift shop, bookstore, arts and crafts shops, stationery store, bowling alley.

Merchant cooperation is essential for such a plan to succeed. Once the town shopping area is improved, merchants should advertise, sponsor sales, conduct special clean-up and paint-up projects, prepare displays, and carry on other measures designed to attract customers and improve the town's shopping area. Local merchants should discourage prospective business from locating elsewhere in the town for small businesses can best serve the community when they are all centrally located.

Small neighborhood business pockets (service stations, corner grocery stores, etc.) have also been delineated along East College Street and South Main. These facilities will accommodate convenience services which would exist in close proximity to those they serve.

Some thought should be given to future parking. While some on-street parking is adequate at present, it may not remain so. The ease with which a shopper is able to park his car in large part determines his interest in shopping in the town shopping area. It would be advisable, therefore, for owners of commercial sites to dedicate part of the land area for off-street parking.

A zoning ordinance for the Town of Boiling Springs is needed to insure that sufficient off-street parking, adequate setbacks and side yards, off-street loading and unloading facilities, and adequate landscaping and buffering are provided.

Manufacturing Land Use. Manufacturing land use is provided for in the plan to accommodate any new industries that may come to Boiling Springs. These sites will also provide some area for future expansion of existing manufacturers.

Industrial sites are located with easy access to either of the two major highways in the area and away from non-conforming uses such as the college and residential areas. At the same time, such areas are proposed in and adjacent to the incorporated area in order to provide municipal service for such facilities.

Industrial development should be very selective in Boiling Springs for fear of creating a conflict with the college and pleasing environment already existing in the town. All new industry should be free of noise, dust, smoke, odor, and congestion. A heavy industry such as a large lumber yard or an asphalt plant could actually prove to be a nuisance. Light industry, such as the Cleveland Sandwich Company, is an example of a manufacturing use not obnoxious to the town's atmosphere.

The most logical means of protecting the existing uses in town from manufacturing uses is by adoption and enforcement of a zoning ordinance.

Public and Semi-Public Land Use. This section will outline a few broad considerations. The Public Facilities Chapter discussed the specifics for various facilities in the community.

Most of the public and semi-public land uses provided in the plan are for expansion of the college and the establishment of recreational facilities.

The town has a need for recreational space of all types. A community park should be located in the town. It is recommended that the land adjacent to Boiling Springs School playground and ballfield be municipally purchased for the expansion of recreational and play area. School facilities could be jointly used with a town recreation program.

This area was selected because it is near the center of town, close to the college campus, would be in conformity with the adjacent uses, and is presently vacant. The town should purchase this property before real estate prices rise.

PRELIMINARY THOROUGHFARE PLAN

Streets perform two primary functions -- circulation around and through the community and access to individual properties within the community. These two functions, when combined, are incompatible. The conflict is not usually serious if both function demands are low and there is little traffic. But when traffic volumes are high due either to through traffic or intensive use of the abutting property, the conflict results in intolerable congestion.

The preliminary thoroughfare plan is superimposed on the Land Development Plan map. This system is designed to form the basic framework of the Boiling Springs street system. Each type of street is designed to serve a specific purpose and the design requirements will vary according to the function of the street, the anticipated roadside development, desired vehicle operating speeds, and the average daily traffic volumes.

The streets which make up the Boiling Springs plan are described as follows:

Major thoroughfares serve to provide rapid and convenient movement throughout the area. Such streets go around points of congestion and often connect cities.

Minor thoroughfares perform the function of collecting traffic from residential, commercial and manufacturing areas and carrying it to a destination or to one of the major thoroughfares. They serve limited areas and since they serve abutting property should not be subject to heavy traffic.

Local access streets serve abutting property and are not intended to carry heavy volumes of traffic. Local access streets may serve residential areas and the business district. Through traffic in residential areas should be discouraged by designing them as loops or cul-de-sacs.

Boiling Springs residents are aware of some of the major circulation problems in the town; such as large traffic volumes on East College Avenue and South Main Streets, congestion at the stop light, no by-pass or convenient alternate routes of Highway 150, and the difficulty of getting from one part of town to another without going through the business area.

The circulation plan encompasses the three divisions of streets and is designed to provide ease of traffic circulation and access to all parts of the town and planning area. Both the town and the N.C. State Highway Commission should approve the following as a preliminary thoroughfare plan.

The following plan has been proposed by the Advance Planning Department of the State Highway Commission:

1. Realign and pave graded portion of SR 1149 from NC 150 (east) to a point 800 feet east of the Flint Hill Road intersection where SR 1149 is presently paved. This would allow for a major thoroughfare (or 150 Bypass) around the southeast of town, thus diverting NC 150's "through" traffic. This section of road could also serve as a loop thoroughfare. Completion of this major thoroughfare bypass will remove inner town traffic from crowded NC 150 and enable traffic to bypass one town when going to another. This project would be State responsibility.

2. Realign intersection at NC 150 south of Rockford Avenue and Riverside Avenue. This dangerous intersection should also have a flashing signal as a warning. This would be State responsibility.

3. Extend Hillcrest Street south to Forest Hills Avenue converging them into one continuous minor thoroughfare. Both streets will have to be widened and a portion of Hillcrest Street paved. This street would provide an "in-town" bypass of NC 150, the college and downtown area. This would be a municipal responsibility.

4. Construct a minor thoroughfare around the campus of Gardner-Webb College as indicated on the map. This would form another portion of the "in-town" loop and relieve traffic congestion in and around the college. This would be a joint responsibility.

5. The Advance Planning Department recommends that a long-range loop thoroughfare along the general alignment shown on the map be included in the plan. They do not see an early need for this facility, however, but its inclusion in the plan would be beneficial in that it may be possible to preserve right-of-way for portions of the loop through subdivision controls.

   The Advance Planning Department states that SR 1195 (Rockford Avenue), SR 1149, and SR 1147 should be added to the plan as minor thoroughfares since they will apparently perform this function when additional urban development occurs.

   Riverside Avenue (SR 1148), College Avenue (SR 1003), and SR 1164 should be designated as major thoroughfares since they serve as radials and have the potential to serve extensive areas.

   SR 1159 should be classified as a major thoroughfare since it is ideally situated to serve as part of a long-range outer loop.

6. In addition to the preceding proposals, the town and developers are responsible for construction of new residential streets. Following are suggested priorities for construction of local access or "residential" streets within the corporate limits only. It is the responsibility of the developer alone to construct streets in the fringe area, although the town can and should supervise construction through subdivision regulations.

   (a) Extend Gordon Avenue to Hillcrest Street to permit through traffic in the northeast quadrant of town.

   (b) Extend Green Street in a southerly direction until it connects with an unnamed street 600 feet west of Memorial Drive. This street would also provide local access around the shopping area.

(c) Connect Fairview Street south of NC 150 with East Branch Avenue to permit through traffic in the southeast quadrant of town. This would also provide greater access to and from Boiling Springs Elementary School.

(d) Complete and pave all other proposed streets as development necessitates.

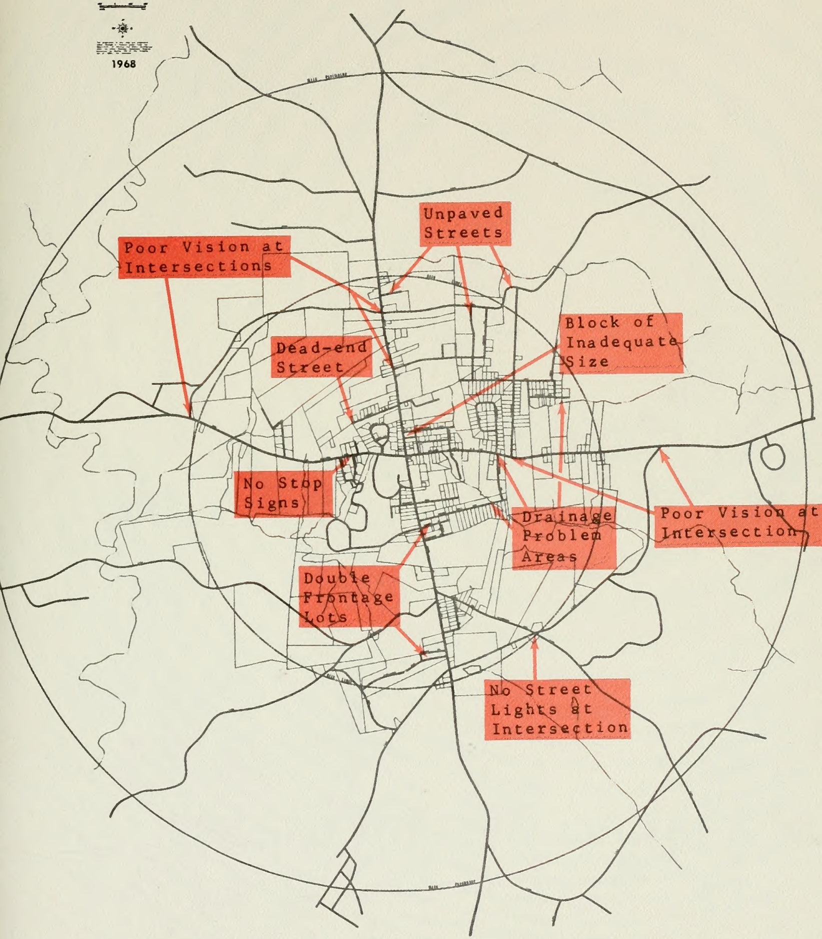
(e) Convert deadend streets into turn-arounds or cul-de-sacs.

The circulation pattern presented in this report represents a preliminary study which has been oriented toward fulfilling the needs of coordinating a comprehensive plan with a functional circulation pattern.

BOILING SPRINGS
NORTH CAROLINA

LAND USE PROBLEMS

1968



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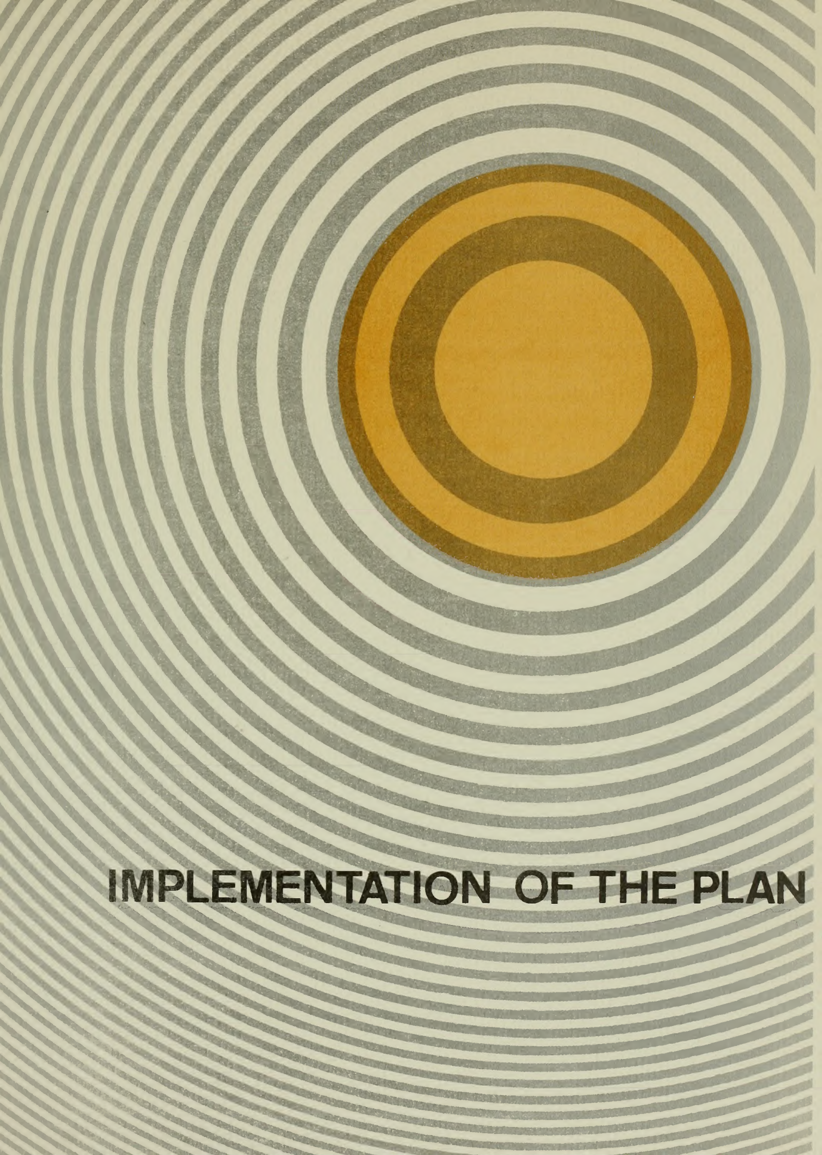

IMPLEMENTATION OF THE PLAN

CHAPTER VII

IMPLEMENTATION OF THE PLAN

Boiling Springs' comprehensive plan will be meaningful to the degree to which it is put into effect -- that is, the degree to which it is recognized in the day-to-day decisions that will mold the future of the community. The plan is a long-range document looking ahead to 1988. A plan like this obviously cannot be carried out all at once, but must be accomplished over a long period through many small steps. Each recommendation of the Planning and Zoning Board to the Town Board of Commissioners should be respected. The day-to-day actions of the Board of Commissioners, other local agencies of governments, and private developers can help build the town on the basis of the plan.

To be effective, the plan must be supported by both private and public actions. Land developers, landowners, and real estate agents must be cognizant of the regulatory measures such as zoning and subdivision regulations which set the broad limits within which development can occur and then improve upon these minimum standards. Private reaction to site choices for industry, schools, parks, and other land uses must be voiced to have a successful implementation of the plan. Public actions by which the plan can be carried out -- besides zoning and subdivision regulations -- are long-range financial programming and referral to the Planning Board of proposals affecting the physical development of the community.

ZONING

The zoning ordinance is the principal means by which the land use plan is carried out. In the past, zoning has often been instituted before there was a plan. It is now recognized that zoning is a tool for carrying out a plan and that zoning not based on a plan is not valid. The Land Development Plan outlines land use objectives to be attained over a substantial period of time. It indicates uses expected to be desirable in the future for Boiling Springs and for the area one-mile beyond the town limits. Zoning, on the other hand, establishes land use controls which are based on the plan but which reflect current conditions. A proposed zoning ordinance for the town will be presented in the Summer of 1969.

SUBDIVISION REGULATIONS

Subdivision regulations may be used by the Planning Board as a guide for subdivision development. They are enforced by withholding the privilege of public recordation of plats that do not meet the established requirements. These regulations set standards for the arrangement and width of streets, the depth and width of lots, setbacks, easements, water and sewerage systems, and street improvements. The proposed subdivision regulations for Boiling Springs (to be presented to the Town Board in Fall, 1969) when adopted, should be strictly enforced.

PUBLIC INVOLVEMENT PROGRAM

Before the plan can be implemented, it will be necessary that public-minded citizens become involved in the development of Boiling Springs. Local organizations such as church groups, civic groups and fraternal organizations can also participate in implementing the Boiling Springs Comprehensive Plan.

Groups such as these could acquire sites for public recreation, such as land near the schools, and dedicate them to the town. They could provide equipment for town parks and recreation areas.

An organization of merchants could be very instrumental in working toward development of the downtown area. Many projects, such as providing street trees, refuse containers, benches, improvement to store fronts and back lots, would be available to such a group. Improvement and beautification of the total downtown area would also be an important concern for such a group.

In all these organizations, efforts of individuals will be needed to serve on advisory boards such as the Planning Board and Board of Adjustment. Garden club members and similarly appearance-conscious individuals could render valuable assistance to the town on a beautification commission.

The town government can only begin the job of making the town a better place to live. The private effort and cooperation of citizens is needed to insure the job is completed. Community involvement is an absolute must.

REVIEW BY THE PLANNING AND ZONING BOARD

One of the most effective ways of implementing the Land Development Plan is to require Planning and Zoning Board review of all proposals that will affect the physical growth of the community. For example, before the Board of Commissioners opens, widens, or vacates a street, such proposals should be referred to the Planning and Zoning Board for their review and report. Similarly, proposals by Cleveland County (in the one-mile extraterritorial jurisdiction of the town) should be referred to the Planning and Zoning Board. This review will help make sure that public improvements are in accord with the Development Plan and the long-range financial program.

GARDNER-WEBB COLLEGE

In the year 1905 the Kings Mountain Baptist Association, meeting at Zoar Baptist Church, voted to establish an academy. Boiling Springs was selected as the location. The academy operated as a high school until 1928. In that year the school became Boiling Springs Junior College.

The name Gardner-Webb was adopted in 1942 to honor two distinguished Cleveland County families. The Baptist State Convention of North Carolina voted senior college status for Gardner-Webb November 13, 1968. The junior year will be started in August, 1969, and the senior year in August of 1970. The first four years or bachelor's degree class will be graduated in the Spring of 1971.

The economic and financial aspects that the college provides to the community are considerable. The college students spend an estimated $250,000 a year in the area, creating more than $1 million in the economy as each dollar is turned over. Some 70 faculty members and 60 staff personnel earn annual salaries amounting to $850,000. In the Fall of 1969, when the college's first junior year is begun, the payroll is expected to be increased to$1.1 million for 150 persons, many of them new faculty members.

Certainly, all the people of the area benefit from the fact that they have a dynamic college nearby. A college in a community enriches the cultural climate and provides a focal point of activities that give depth to enjoyment of life. Only through the continued support of people in the area can the school maintain its growth and influence on the community.

By the same token, the college will have to support the community as it grows. A good portion of this already occurs in that facilities such as the school library, swimming pool, and spcial events are open to the town's people.

The college has a long-range development plan that includes new building facilities, campus streets, sidewalks, etc., to be constructed. It is not the intention of this report to attempt to undertake the physical planning of Gardner-Webb College -- this has already been done. It should be stated, however, that future plans of the college should be correlated with the comprehensive plan for the Boiling Springs planning area.

Town officials, therefore, should make every effort to bring the college community into municipal operations. Appointing college-connected personnel to advisory committees such as Planning Board, Zoning Boards of Adjustment, downtown improvement committees, town beautification committees, etc., is just one method.

With both town and college having long-range plans, most major items concerning the community could be planned well in advance with few conflicts -- thereby resulting in mutual social, economical, and physical benefits.

CONCLUSIONS

The fruits of planning efforts exercised in the Boiling Springs area will rest not so much in the techniques and controls devised, as in the people and the spirit with which they listen -- and answer. This plan is a framework within which decisions may be made regarding future development. It is not an absolute, nor a set of directions for easy solutions.

What spirit of imagination is evident in the existing development of the Boiling Springs area? Is there anything at all extraordinary or is it simply land, buildings and people? What incentives to distinction are being reflected in Boiling Springs physical design? Are there several items in which the town takes pride? Are the citizens and leaders of the town willing to establish something people will have to pay for, rather than having only that which pays for itself? Whatever the case, planning progress will depend upon the imagination and responsibility of the community's area residents.

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